WHAT BIRD IS THAT?

FRANK M. CHAPMAN

Louisa B. Carney.
June 1910.

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WHAT BIRD IS THAT?

By Frank M. Chapman

Curator of Ornithology in the American Museum of Natural History

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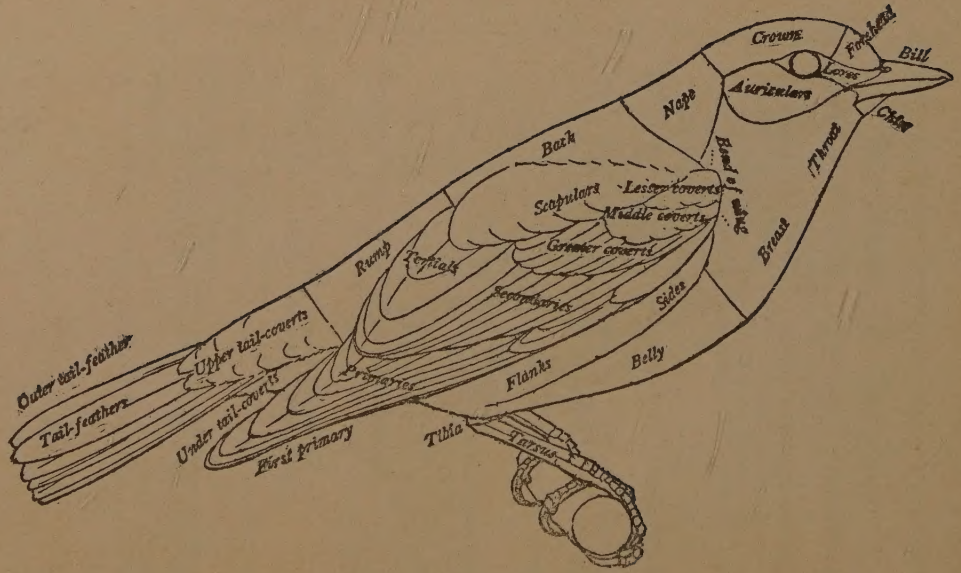

'MAP' OF A BIRD (Bluebird not quite life size).

The student should learn to name the parts of a bird's plumage in order that he may write, as well as understand, descriptions of a bird's color and markings.

WHAT BIRD IS THAT?

A POCKET MUSEUM
OF THE LAND BIRDS OF
THE EASTERN UNITED STATES
ARRANGED ACCORDING TO SEASON

BY

FRANK M. CHAPMAN

CURATOR OF BIRDS IN THE AMERICAN MUSEUM OF
NATURAL HISTORY AND EDITOR OF "BIRD-LORE"

WITH 301 BIRDS IN COLOR
BY
EDMUND J. SAWYER

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1920

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INTRODUCTION

As Curator of the Department of Birds of the American Museum of Natural History I have had exceptional facilities for the arrangement of collections designed to give students a comprehensive view of local bird-life without confusing them with unnecessary details.

Among other aids to this end a collection of 'Birds Found within 50 Miles of New York' has been placed in a special hall and so grouped that the visitor who wishes to identify some bird seen within these limits may do so with the least possible difficulty. In addition to the 'General Systematic Collection,' containing specimens of the 350-odd species of birds which have been recorded from the New York City region, there is also a 'Seasonal Collection.' This Seasonal Collection contains only the birds of the month. Its base is the 'Permanent Resident Birds,' or those which, like the Crow, are with us throughout the year. To these, the migratory species are added or subtracted, as they come or go. The collection of migratory species is therefore revised the first of each month. Birds which are due to arrive during the month are added, those which have left us are withdrawn The Seasonal Collection thus give us, at a glance, a picture of the bird-life of the month and correspondingly limits the field of our inquiry when we go to it to learn the name of some strange bird recently observed. In January, therefore, we have not to consider the birds of June, nor need we be concerned with winter birds in summer. The season of occurrence thus gives us an important clue to a bird's identity.

For somewhat more than a quarter of a century this small collection has achieved its object so effectively that I have attempted to embody the idea it demonstrates in a series of drawings which have been admirably executed by Mr. Edmund Sawyer. As foundation plates or 'collections,' we have first two 'cases' of the winter land birds of the Northeastern States, or from about Maryland northward, containing the Permanent Residents, which form part of the bird-life of every month of the year, and the Winter Visitants, or those birds which come from the North in the fall to remain with us until the following spring.

Cases 3 and 4 contain the Permanent Resident and Winter Visitant land birds of the Southern States. Whether the student is in the North or in the South he has, therefore, a 'collection' of the land birds which he may expect to find during the winter months.

Cases 5 to 8 contain the migrants arranged according to the order of their arrival from the South n the vicinity of New York City. Since it is not practicable to have cases containing collections of migrants for other latitudes, data are given showing what changes in dates should be made to adapt the schedule presented to other localities, including Washington, D. C., Ossining, N. Y., Cambridge, Mass., northern Ohio, Glen Ellyn, near Chicago, and southeastern Minnesota. The records for these localities are quoted from the author's 'Handbook of Birds of Eastern North America' to which they were contributed respectively by Dr. C. W. Richmond, Dr. A. K. Fisher, William Brewster, Lynds Jones, B. T. Gault, and Dr. Thos. S. Roberts.

With these facts, the cases in a large measure tell their own story, just as does our Museum Seasonal Collection; but further to assist the student I have added what may be termed a 'label' for each of the 'specimens' they

contain. These labels include comments on each bird's distinctive characters, a statement of its nesting and winter range, the notes on its status at various localities, to which I have just referred, and brief remarks on its habits.

It is the specimens, however, not the labels, which warrant the publication of this little volume, for I hope that, like their prototypes in the American Museum, they will be a means of acquainting us with "the most eloquent expressions of Nature's beauty, joy and freedom," and thereby add to our lives a resource of incalculable value.

While the birds in the cases are small, they are drawn and reproduced with such accuracy that no essential detail of color or form is lost. Above all, they have the rare merit of being all drawn to nearly the same scale. One will soon learn therefore to measure the proportions of unknown birds by comparison with those with which one is familiar, and since relative size is the most obvious character in naming birds in nature, this is a feature of the first importance.

The student is strongly urged *first*, to become thoroughly familiar with the 'map' of a bird given in the frontispiece: *second*, to use an opera- or field-glass when observing birds: *third*, to write descriptions of unknown birds *while they are in view* stating their length, shape, and as many details of their color and markings as can be seen: *fourth*, to remember that one is not likely to find birds except in their regular seasons: and, *fifth*, to take this book afield with him and make direct comparison of the living bird with its colored figure. The wide margins are designed for use in recording field-notes.

FRANK M. CHAPMAN.

American Museum of Natural History,
New York City.
March, 1920.

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BIRDS AND SEASONS

BEFORE a leaf unfolds or a flower spreads its petals, even before the buds swell, and while yet there is snow on the ground, the birds tell us that spring is at hand. The Song Sparrow sings "Spring, spring, spring, sunny days are here"; the Meadowlark blows his fife, the Downy rattles his drum, and company after company of Grackles in glistening black coats, and of Red-wings with scarlet epaulets, go trooping by. For the succeeding three months, in orderly array, the feathered army files by, each member of it at his appointed time whether he comes from the adjoining State or from below the equator.

Besides the Blackbirds, March brings the Robin and Bluebird, Woodcock, Phœbe, Meadowlark, Cowbird, Kingfisher, Mourning Dove, Fox, Swamp, White-throated and Field Sparrows.

Near New York City the New Year of the birds has now passed its infancy and in April each day adds perceptibly to its strength. 'Pussy' willows "creep out along each bough," skunk cabbage rears its head in low, wet woods, and in sun-warmed places early wild flowers peep from beneath the sodden leaves. With swelling ranks the migratory army moves more steadily northward. Species which arrived late in March become more numerous, and to them are soon added the Vesper, Savannah, and Chipping Sparrows, and other seed-eaters; and when, with increasing warmth, insects appear, the pioneer Phœbe is followed by other insect-eating birds, like the Swallows, Pipit, Hermit Thrush, Myrtle and Palm Warblers, Louisiana Water-thrush and Ruby-crowned Kinglet.

The true bird student will now pass every available moment afield, eagerly watching for the return of old

friends and more eagerly still for possible new ones. But enjoyment of this yearly miracle should not be left only to the initiated. We need not be ornithologists to be thrilled when the Robin's song in March awakes long silent echoes, or the Thrasher's solo rings loud and clear on an April morning. The Catbird singing from near his last year's home in the thickening shrubbery, the House Wren

"RED-WINGS WITH SCARLET EPAULETS GO TROOPING BY"

whose music bubbles over between bustling visits to an oft-used bird-box, the Chimney Swift twittering cheerily from an evening sky, may be heard without even the effort of listening and each one, with a hundred others, brings us a message if we will but accept it. And I make no fanciful statement when I say that it is a message we can ill afford to lose.

With May come the Thrushes—Wood Thrush, Veery, Olive-back and Gray-cheek, the last two en route to the north—the Orioles, Cuckoos, Vireos, and the Bobolink who began his four thousand mile journey from northern Argentina in March. But May is preëminently the Month of Warblers, "most beautiful, most abundant, and least known" of our birds. To the eight species which have already arrived, there may be added over twenty more, represented by a number of individuals beyond our power to estimate. We may hear the Robin, Thrasher, and Wren, without listening, but we will see few Warblers without looking; and this, in a measure, accounts for the fascination which attends their study.

After May 15 there is an evident thinning in the ranks of the migrating army, and by June 1 we shall see only a few stragglers. The Transient Visitors will have gone to their more northern homes and our bird population will then consist only of the ever present Permanent Residents and the Summer Residents which the great northward march of the birds has brought us from the South.

Although June may be called the Month of Nests, nest-building begins long before the migration ends. Some Owls and Hawks lay in March, and the Bluebird, White-breasted Nuthatch and Robin have eggs by April 20, while most of our birds go to housekeeping during the latter half of May. Nevertheless, it is in June that their domestic life is at its height; and to the student of birds' habits this is by far the most interesting month in the year.

Birds that raise two or even three broods will still be occupied with household affairs in July, but one-brooded birds, having launched their families, will seek retirement to undergo the trying ordeal of molt, whereby they will get a complete new costume. Often this will be quite

unlike the one in which they arrived from the South—as the student will discover, sometimes to his confusion! In August, the Month of Molt, the seclusion sought by many of our summer birds induces the belief that they

TREE SWALLOWS . . . RESTING IN ROWS ON WAYSIDE WIRES

have left us, but toward the latter part of the month they reappear. The first week in August virtually marks the end of the song season. The Wood Pewee and Red-eyed Vireo remain in voice throughout the month, but the great chorus which has made May, June and most of July vocal, we shall not hear before another spring—so

short is the time when we are blessed by the songs of birds.

Meanwhile the feathered army has begun its retreat to winter quarters. As early as July 15, Tree Swallows will arrive and by the end of the month will be seen resting in rows on wayside telegraph wires, or en route to their roosts in the marshes. In the now heavily leaved forests the returning Warblers and Flycatchers will not be so easily observed as they were in May, but in September they become too abundant to be overlooked. The southward movement grows in strength until late September, when the greater part of the insect-eating birds have left us, and it is terminated by the frosts, and consequent falling leaves, of October.

But just as in the spring some of the northbound migrants drop from the ranks to spend the summer with us, so in the fall some of the southbound travelers will remain with us for the winter. The Junco, which we are wont to think of as only a winter bird, arrives the latter part of September to remain until April, and with him come the Golden-crowned Kinglet, Brown Creeper and Winter Wren—all to stay until spring. October will bring the Horned Lark, Pine Finch, Snow Bunting, Tree Sparrow and Northern Shrike and these birds with the ones just mentioned, and the ever faithful Permanent Residents, give us a goodly winter company.

But the possibilities do not end here; there may be Redpolls, American and also White-winged Crossbills, perhaps Pine Grosbeaks, and, best of all, Evening Grosbeaks, who of recent years have been coming to us more or less regularly from no man knows where.

So from one year's end to the other, there is not a month, a week or day which has not interests of its own. The bird student may pass his life in one place, but he can never say "I have finished" for the morrow may bring

some new bird or new fact. How immeasurably this association with the birds adds to the joy of life! What new meanings their comings and goings give to the changing seasons; the very air is made eloquent by their calls and songs. Why should we not all "come at these enchantments"?

IN OCTOBER, WHEN MIGRATING HAWKS DOT THE SKY, THE GREAT SOUTHWARD MARCH OF THE BIRDS IS NEARING ITS END.

A POCKET MUSEUM OF THE LAND BIRDS OF THE EASTERN UNITED STATES

Arranged according TO SEASON

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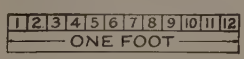
CASE NO. 1 FIGS. 1-19

PERMANENT RESIDENT LAND BIRDS OF THE NORTHERN UNITED STATES



1 Bob-white, male, p. 1
2 Bob-white, female, p. 1
3 Ruffed Grouse, p. 2
4 Red-shouldered Hawk, adult, p. 12
5 Red-tailed Hawk, young, p. 11
6 Red-tailed Hawk, adult, p. 11
7 Sparrow Hawk, male, p. 17
8 Sparrow Hawk, female, p. 17
9 Cooper's Hawk, young female, p. 10
10 Cooper's Hawk, adult male, p. 10
11 Sharp-shinned Hawk, adult male, p. 9
12 Sharp-shinned Hawk, young female, p. 9
13 Screech Owl, gray phase, p. 22
14 Screech Owl, rufous phase, p. 22
15 Barred Owl, p. 20
16 Great Horned Owl, p. 22
17 Long-eared Owl, p. 19
18 Short-eared Owl, p. 20
19 American Crow, p. 46

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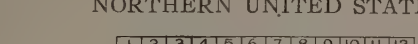
CASE NO. 2 FIGS. 20-63

PERMANENT RESIDENT LAND BIRDS OF THE NORTHERN UNITED STATES



20 Blue Jay, p. 44
21 Flicker, male, p. 32
22 Flicker, female, p. 32
23 Meadowlark, p. 50
24 Starling, winter, p. 47
25 Starling, summer, p. 47
26 Downy Woodpecker, male, p. 28
27 Downy Woodpecker, female, p. 28
28 Hairy Woodpecker, male, p. 28
29 Hairy Woodpecker, female, p. 28
30 English Sparrow, male, p. 57
31 English Sparrow, female, p. 57
32 Purple Finch, female, p. 57
33 Purple Finch, male, p. 57
34 Song Sparrow, p. 74
35 Goldfinch, female, p. 60
36 Goldfinch, male, p. 60
37 Chickadee, p. 125
38 White-breasted Nuthatch, male, p. 123
39 White-breasted Nuthatch, female, p. 123
40 Cedar Waxwing, p. 85

WINTER VISITANT LAND BIRDS OF THE NORTHERN UNITED STATES

or those which come from the North in the Fall and usually remain until Spring:

41 Saw-whet Owl, p. 21
42 Prairie Horned Lark, p. 43
43 Junco, p. 73
44 Tree Sparrow, p. 71
45 White-throated Sparrow, adult, p. 70
46 White-throated Sparrow, young, p. 70
47 Redpoll, female, p. 59
48 Redpoll, male, p. 59
49 American Crossbill, male, p. 58
50 American Crossbill, female, p. 58
51 White-winged Crossbill, male, p. 58
52 White-winged Crossbill, female, p. 58
53 Pine Grosbeak, male, p. 56
54 Pine Grosbeak, female, p. 56
55 Siskin, p. 60
56 Northern Shrike, p. 86
57 Snow Bunting, p. 61
58 Winter Wren, p. 120
59 Brown Creeper, p. 122
60 Red-breasted Nuthatch, male p. 124
61 Red-breasted Nuthatch, female, p. 124
62 Golden-crowned Kinglet, female, p. 127
63 Golden-crowned Kinglet, male, p. 127

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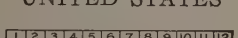
CASE NO. 3 FIGS. 1-27

WINTER LAND BIRDS OF THE SOUTHERN UNITED STATES



Permanent Resident species, or those which are present throughout the year, are marked "R." Winter Visitant species, or those which come from the North in the Fall and remain until Spring, are marked "W."

1 Bob-white, male, R., p. 1
2 Bob-white, female, R., p. 1
3 Mourning Dove, R., p. 5
4 Ground Dove, R., p. 5
5 Sparrow Hawk, female, R., p. 17
6 Sparrow Hawk, male, R., p. 17
7 Sharp-shinned Hawk, adult male, R., p. 9
8 Sharp-shinned Hawk, young female, R., p. 9
9 Turkey Vulture, R., p. 6
10 Black Vulture, R., p. 7
11 Bald Eagle, adult, R., p. 14
12 Red-shouldered Hawk, adult, R., p. 12
13 Red-tailed Hawk, adult, R., p. 11
14 Osprey, R., p. 18
15 Marsh Hawk, adult male, R., p. 9
16 Barred Owl, R., p. 20
17 Barn Owl, R., p. 19
18 Belted Kingfisher, male, R., p. 26
19 Screech Owl, gray phase, R., p. 22
20 Flicker, male, R., p. 32
21 Red-headed Woodpecker, adult, R., p. 31
22 Red-headed Woodpecker, young, R., p. 31
23 Red-bellied Woodpecker, male R., p. 32
24 Hairy Woodpecker, male, R., p. 28
25 Downy Woodpecker, male, R., p. 28
26 Yellow-bellied Sapsucker, adult male, W., p. 30
27 American Crow, R., p. 46

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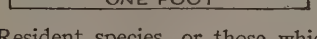
CASE NO. 4 FIGS. 28-82

WINTER LAND BIRDS OF THE SOUTHERN UNITED STATES



Permanent Resident species, or those which are present throughout the year, are marked "R." Winter Visitant species, or those which come from the North in the Fall and remain until Spring, are marked "W."

28 Red-winged Blackbird, male R., p. 49
29 Red-winged Blackbird, female, R., p. 49
30 Cowbird, male, R., p. 48
31 Cowbird, female, R., p. 48
32 Towhee, female, R., p. 76
33 Towhee, male, R., p. 76
34 Cardinal, female, R., p. 77
35 Cardinal, male, R., p. 77
36 Vesper Sparrow, W., R., *p. 63
37 Fox Sparrow, W., p. 76
38 House (or "English") Sparrow, male, R., p. 57
39 House (or "English") Sparrow, female, R., p. 57
40 White-throated Sparrow, adult, W., p. 70
41 Junco, W., p. 73
42 Song Sparrow, R., p. 74
43 Field Sparrow, R., p. 72
44 Swamp Sparrow, W., p. 75
45 Chipping Sparrow, winter, R., p. 71
46 Tree Sparrow, W., p. 71
47 Savannah Sparrow, W., p. 64
48 Purple Finch, adult male, W., p. 57
49 Purple Finch, female and young male, W., p. 57
50 Goldfinch, male, summer, R., p. 60
51 Goldfinch, female and winter, R., p. 60
52 Phœbe, R., p. 38
53 Tree Swallow, W., p. 83
54 Cedar Waxwing, R., W., *p. 85
55 Loggerhead Shrike, R., p. 87
56 Myrtle Warbler, winter, W., p. 100
57 Pine Warbler, R., p. 107
58 Palm Warbler, winter, W., p. 108
59 Yellow Palm Warbler, winter, W., p. 108
60 Maryland Yellowthroat, male, R., p. 113
61 Maryland Yellowthroat, female, R., p. 113
62 Pipit, W., p. 116
63 House Wren, R., p. 120
64 Carolina Wren, R., p. 119
65 White-breasted Nuthatch, R., p. 123
66 Brown-headed Nuthatch, R., p. 124
67 Tufted Titmouse, R., p. 125
68 Carolina Chickadee, R., p. 126
69 Blue-gray Gnatcatcher, R., p. 129
70 Ruby-crowned Kinglet, male, W., p. 128
71 Ruby-crowned Kinglet, female, W., p. 128
72 Golden-crowned Kinglet, male, W., p. 127
73 Golden-crowned Kinglet, female, W., p. 127
74 Florida Grackle, R., p. 53
75 Blue Jay, R., p. 44
76 Mockingbird, R., p. 117
77 Hermit Thrush, W., p. 132
78 Bluebird, male, R., p. 134
79 Meadowlark, R., p. 50
80 Robin, R., W.,* p. 133
81 Catbird, R., p. 117
82 Brown Thrasher, R., p. 118

*Winter Visitant only in the more southern States; a Permanent Resident in North Carolina and Virginia.

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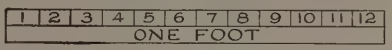
APRIL 10-20

CASE NO. 5 FIGS. 1-38

EARLY SPRING MIGRANT LAND BIRDS OF THE EASTERN UNITED STATES



The birds are arranged in the order of their arrival from the South in the vicinity of New York City. Nos. 1-19, 22-24, 26, 27, 30, 31, 36-38 winter in the Southern (chiefly Gulf) States. The remainder winter in the tropics and reach the Southern States a month or more before they arrive at New York. Compared with the dates here given for New York City, Washington dates are from ten to fifteen days earlier; Boston, about a week later; northern Ohio, eight to twelve days earlier; northern Illinois, six to ten days earlier; southeastern Minnesota, about the same as those for New York.

1 Purple Grackle, male, p. 53
2 Bronzed Grackle, male, p.53
3 Rusty Blackbird, female, p. 52
4 Rusty Blackbird, male, p. 52
5 Red-winged Blackbird, female, p. 49
6 Red-winged Blackbird, male, p. 49
7 Fox Sparrow, p. 76
8 Cowbird, male, p. 48
9 Cowbird, female, p. 48
10 Kingfisher, male, p. 26
11 Mourning Dove, p. 5
12 Robin, p. 133
13 Bluebird, male, p. 134
14 Field Sparrow, p. 72
15 Phœbe, p. 38
16 Vesper Sparrow, p. 63
17 American Pipit, p. 116
18 Yellow-throated Warbler, p. 105 (Southern States)
19 Sycamore Warbler, p 105. (lower Mississippi Valley)
20 Bachman's Warbler, female, p. 94 (Southern States)
21 Bachman's Warbler, male, p. 94 (Southern States)
22 Swamp Sparrow, p. 75
23 Savannah Sparrow, p. 64
24 Tree Swallow, p. 83
25 Purple Martin, male, p. 82
26 Hermit Thrush, p. 132
27 Myrtle Warbler, p. 100
28 Swainson's Warbler, p. 93 (Southern States)
29 Prothonotary Warbler, male, p. 93 (Southern States and Mississippi Valley)
30 Sapsucker, male, p. 30
31 Chipping Sparrow, p. 71
32 Barn Swallow, p. 83
33 Summer Tanager, male, p. 81 (Southern States)
34 Summer Tanager, female, p. 81 (Southern States)
35 Louisiana Water-Thrush, p. 110
36 Ruby-crowned Kinglet, male, p. 128
37 Ruby-crowned Kinglet, female, p. 128
38 Yellow Palm Warbler, p. 108

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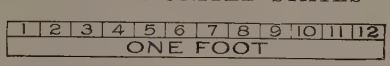
APRIL 20-30

CASE NO. 6 FIGS. 39-74

EARLY SPRING MIGRANT LAND BIRDS OF THE EASTERN UNITED STATES



The birds are arranged in the order of their arrival from the South in the vicinity of New York City. Nos. 43, 46, 47, 51, 57, 60-64, 67, 68, 70-72 winter in the Southern (chiefly Gulf) States. The remainder winter in the tropics and reach the Southern States a month or more before they arrive at New York. Compared with the dates here given for New York City, Washington dates are from ten to fifteen days earlier; Boston, about a week later; northern Ohio, eight to twelve days earlier; northern Illinois, six to ten days earlier; southeastern Minnesota, about the same as those for New York.

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40 Chuckwill's Widow (Southern States), p. 33
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42 Chimney Swift, p. 35
43 Red-headed Woodpecker, p. 31
44 Least Flycatcher, p. 42
45 Yellow-headed Blackbird, male, p. 49 (Mississippi Valley)
46 Seaside Sparrow, p. 67
47 Sharp-tailed Sparrow, p. 66
48 Clay-colored Sparrow, p. 72 (Mississippi Valley)
49 Painted Bunting, female, p. 79 (Southern States)
50 Painted Bunting, male, p. 79 (Southern States)
51 Towhee, male, p. 76
52 Blue Grosbeak, male, p. 78 (Southern States)
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54 Bank Swallow, p. 84
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61 Palm Warbler, p. 108
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63 Blue-gray Gnatcatcher, p. 129 (Southern States)
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65 Bell's Vireo, p. 92 (Mississippi Valley)
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72 Brown Thrasher, p. 118
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MAY 1-10

CASE NO. 7 FIGS. 1-39

LATE SPRING MIGRANT LAND BIRDS OF THE EASTERN UNITED STATES

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1 Yellow-billed Cuckoo, p. 25
2 Black-billed Cuckoo, p. 25
3 Ruby-throated Hummingbird, female, p. 36
4 Ruby-throated Hummingbird, male, p. 36
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9 Baltimore Oriole, female, p. 52
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14 Bobolink, male, p. 48
15 Lincoln's Sparrow, p. 75
16 Grasshopper Sparrow, p. 64
17 Henslow's Sparrow, p. 65
18 Leconte's Sparrow, p. 65 Mississippi Valley)
19 Lark Sparrow, p. 68 (Mississippi Valley)
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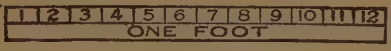
MAY 10-20

CASE NO. 8. FIGS. 40-82

LATE SPRING MIGRANT LAND BIRDS OF THE EASTERN UNITED STATES

For times of arrival at other localities see remarks under Case No. 6.



40 Yellow Warbler, female, p. 99
41 Yellow Warbler, male, p. 99
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79 Long-billed Marsh Wren, p. 122
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81 Olive-backed Thrush, p. 131
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LIST OF ABBREVIATIONS

A. V. Accidental Visitant. A bird found beyond the limits of its usual range.

L. Length of a bird from the tip of its bill to the end of its tail. Remember that living birds look shorter than the measurements of specimens given beyond.

P. R. Permanent Resident. A species which is found in the same locality throughout the year. The Bob-white, Ruffed Grouse, most Owls, and Hawks, the Crow, Jays, Black-capped Chickadee and the White-breasted Nuthatch are Permanent Residents.

S. R. Summer Resident. A species which comes from the South in the spring and, after nesting, returns to its winter quarters.

T. V. Transient Visitant. A species which visits us in the spring while en route to its more northern nesting grounds, and in the fall when returning to its winter home in the South. Most Transient Visitants are found both in the spring and fall, but some, like the Connecticut Warbler, are found in the North Atlantic States only in the fall.

W. V. Winter Visitant. A species which comes from the North to remain with us all, or part of the winter and then return to the North. Winter Visitants may arrive in September and remain until April, or they may come later and only for a brief stay.

NOTE. Measurements are in inches.

Land Birds of the Eastern United States

GALLINACEOUS BIRDS. ORDER GALLINÆ

AMERICAN QUAIL. FAMILY ODONTOPHORIDÆ

BOB-WHITE

Colinus virginianus virginianus. *Case* 1, *Figs.* 1, 2

The black and white markings of the male are respectively buff and brown in the female. In flight the Bob-white, or Quail, suggests a Meadowlark, but the tail is without white feathers. L. 10.

Range. Eastern United States north to Minnesota and Maine south to the Gulf. A Permanent Resident. Severe winters and much shooting have made it rare in the more northern parts of its range.

Washington, common P. R. Ossining, common P. R. Cambridge, P. R. N. Ohio, not common P. R. Glen Ellyn, rare P. R. SE. Minn., common P. R.

Except when nesting Bob-whites live in flocks or "coveys" usually composed of the members of one family. Their song, heard in spring and summer, is the clear, ringing two- or three-noted whistle which gives them their common name. Their fall and winter notes, which sportsmen term "scatter calls" are signals by which the members of a flock keep within speaking distance of one another. "*Where* are you?" "*Where* are you?" they seem to say. As with other protectively colored, ground-inhabiting birds, Bob-whites do not take wing until one

almost steps upon them. Then, like a bursting bomb, the covey seems to explode, its brown pieces flying in every direction. The nest is on the ground and the 10–18 white, pear-shaped eggs are laid in May or June.

The Florida Bob-white (*C. v. floridanus*, Case 3, Figs. 1, 2), a smaller darker race is resident in Florida, except in the northern part of the state. It begins to nest in April.

GROUSE. FAMILY TETRAONIDÆ

CANADA SPRUCE PARTRIDGE

Canachites canadensis canace

The male is a grayish bird with a jet black throat and breast, the former bordered with white; the skin above the eye is red. The female is barred with black and reddish brown with a black mottled tail tipped with brown. L. 15.

Range. Northern parts of United States from New Brunswick to Manitoba. Other races are found throughout the wooded parts of Canada and Alaska.

An unsuspicious inhabitant of swampy coniferous forests. Now rare in the United States. It nests on the ground in June, laying 9–16 eggs, buff, lightly speckled with brown.

RUFFED GROUSE

Bonasa umbellus umbellus. Case 1, Fig. 3

The female resembles the male in color but has the black neck-tufts smaller. The tail-feathers vary from gray to bright rusty. L. 17.

Range. Eastern United States south in the Alleghanies to Georgia. In the southern states the Grouse is often called 'Pheasant.' A Permanent Resident.

Washington, not common P. R. Ossining, common P. R. Cambridge, P. R., formerly very common. N. Ohio, rare P. R. Glen Ellyn, rare and local P. R.

On our western plains and prairies there is a Grouse which we call Prairie Hen and we might well apply the

name Wood Hen to this Grouse of our forests. To flush a Grouse in the quiet of the woods always makes the "heart jump." His whirring wings not only produce the roar which accompanies his flight, but they are also responsible for the "drumming" which constitutes the Grouse's song as sitting upright on some favorite log, he rapidly beats the air with his wings.

The horny fringes which in winter border the toes of the Grouse, or Partridge, as he is also called, form in effect snow-shoes which help to support the bird on soft snow. At this season they also feed in trees on buds and catkins, and they may roost in trees or seek a bed by plunging into a snow-bank.

The nest, lined with leaves, is placed at the base of a tree or stump; the 8–14 buffy eggs are laid in May.

The Canada Ruffed Grouse (*B. u. togata*), of northern New England and northwards is grayer above and more distinctly barred below.

PRAIRIE CHICKEN

Tympanuchus americanus

The Prairie Hen has a rounded or nearly square tail and a barred breast; in the Sharp-tailed Grouse the tail is pointed, the breast with V-shaped markings. L. 18.

Range. Central Plains region from Texas to Manitoba, east to Indiana. Migratory at its northern limits.

Glen Ellyn, P. R. local, S. E. Minn., P. R. much decreased in numbers.

The Ruffed Grouse sounds his rolling, muffled drum-call in the seclusion of the forest, but the Prairie Hen beats his loud *boom-ah-boom* in the open freedom of the plains. Hardy and strong of wing, he can cope with winter storms and natural enemies, but against the combined assault of man, dog, and gun, he cannot successfully contend.

About a dozen buff-olive eggs are laid on the ground in April or early May.

HEATH HEN

Tympanuchus cupido

This is a close relative of the Prairie Hen, having the black neck-tuft of less than ten feathers with pointed, not rounded, ends. It is now found only on the Island of Martha's Vineyard, but formerly inhabited plains or barrens, locally, from New Jersey to Massachusetts. It nests in June.

TURKEYS. FAMILY MELEAGRIDÆ

WILD TURKEY

Meleagris gallopavo silvestris

The Wild Turkey was formerly found as far north as Maine and Ontario but it is unknown now north of central Pennsylvania. South of Maryland it is not uncommon locally.

Range. Kansas and central Pennsylvania to the Gulf coast, and northern Florida. Non-migratory.

Washington, rare P. R.

Our domestic Turkey is descended from the Mexican Wild Turkey an like that race has the upper tail-coverts and tail tipped with whitish, whereas in our eastern Wild Turkey these tips are chestnut. The nest is on the ground and 10–14 eggs, pale cream-color finely speckled with brownish, are laid in April.

The Florida Wild Turkey (*M. g. osceola*), of southern Florida, is smaller and the white bars on the primaries are narrower and more broken.

PIGEONS AND DOVES. ORDER COLUMBÆ

PIGEONS AND DOVES. FAMILY COLUMBIDÆ

MOURNING DOVE

Zenaidura macroura carolinensis. *Case 3, Fig. 3; Case 5, Fig. 11*

Except the southern little Ground Dove, this is our only Dove. Its long, pointed tail and the swift, darting flight are its field characters. It is often mistaken for the Wild or Passenger Pigeon, now extinct. The two birds differ in size and in color, but size is a matter of distance, and color, of comparison, so it seems probable that as long as there is a possibility of seeing a Passenger Pigeon, Mourning Doves will be mistaken for them. L. 11¾. The Wild Pigeon is about five inches longer.

Range. North America. In a railway journey from the Atlantic to the Pacific one may expect to see the Dove daily. Winters from Virginia southward, migrating northward in March.

Washington, P. R., common, except in midwinter. Ossining, common S. R., Mch. 3–Nov. 27; a few winter. Cambridge, rather rare T. V., Apl. 8–June 18; Sept. 18–Nov. 15. N. Ohio, common S. R., Mch. 20–Oct. 25; rare W. V. Glen Ellyn, tolerably common S. R., formerly common, Mch. 12–Oct. 21. S.E. Minn., common S. R., Mch. 15–Dec. 25.

Doves are particularly common in the southern states where, ranked as game-birds, they are shot in large numbers. The Wild Pigeon's note was an explosive squawk; the Dove's is a soft, mournful *coo-oo-ah, coo-o-o-coo-o-o-coo-o-o-*. During the winter, Doves are usually found in small flocks but, unlike the Wild Pigeon, they nest in scattered pairs. The nest is in a tree or on the ground. Two white eggs are laid in April.

GROUND DOVE

Chæmepelia passerina terrestris. *Case 3, Fig. 4*

The female is duller than the male. L. 6¾.

Range. Tropical and subtemperate parts of the Western Hemi-

sphere. Our form is found in Florida and on the coast region from North Carolina to Texas.
Washington, accidental; two records, Sept., Oct.

This dainty, miniature Pigeon is common in southern gardens and old fields. It runs gracefully before one, and when flushed rises with a whirring flight but soon alights, usually on the ground. Its call is a crooning *coo*. The nest is placed on the ground and in low trees and bushes. Two white eggs are laid in March.

BIRDS OF PREY. ORDER RAPTORES

AMERICAN VULTURES. FAMILY CATHARTIDÆ

TURKEY VULTURE

Cathartes aura septentrionalis. Case 3, Fig. 9

Head red, plumage with a brownish cast. Young birds have the head covered with brownish down. L. 30.
Range. Most of the Western Hemisphere in several subspecies; in the eastern states north to northern New Jersey and, locally, southern New York. Migrating south from the northern part of its range.
Washington, abundant P. R. Ossining, A. V. Cambridge, casual, two records. N. Ohio, tolerably common S. R., Mch. 5–Oct. 30. SE. Minn., common S. R., Apl. 27.

The 'Turkey Buzzard' has a wider wing-stretch and is a better aviator than the Black Vulture. It is more a bird of the country than the last-named species which is the common Vulture of the streets in many southern cities. Extremely graceful in the air, it is far from pleasing when at rest. The two dull white, brown-marked eggs are laid on the ground under logs, in crevices in rocks, etc., in March in Florida, in April in Virginia.

BLACK VULTURE

Catharista urubu urubu. Case 3, Fig. 10

Head black, plumage without the brownish cast of the Turkey Vulture.

Range. Eastern U. S., north to Virginia; an abundant Permanent Resident. Washington, casual, Mch., July, Dec.

The Vulture of southern cities; a frequenter of slaughter houses and markets. In flight the under surfaces of the wing look silvery. It is by no means so impressive a figure in the air as the Turkey Vulture. Two pale bluish white eggs, generally with brown markings, are laid on the ground under logs, bushes, palmettoes, etc., in March and April.

HAWKS, EAGLES, KITES, ETC. FAMILY BUTEONIDÆ

SWALLOW-TAILED KITE

Elanoides forficatus forficatus

The head and lower parts are white, the rest of the plumage glossy black; the tail deeply forked. L. 24.

Range. Florida to South Carolina, and up the Mississippi Valley rarely to Saskatchewan; winters south of the United States, returning in March.

Washington, three records, Aug.; Apl. SE. Minn., uncommon S. R., May 4.

Color, form, grace, and power of motion combine to make the flight of the Swallow-tail an impressive demonstration of the bird's mastery of the air. It feeds on lizards and small snakes which it captures when on the wing from the branches of trees. The nest is placed in the upper branches of tall trees, 2–3 eggs heavily marked with brown being laid in Florida in April; in Iowa in June.

WHITE-TAILED KITE

Elanus leucurus

A gray bird with white underparts, rather short white tail and black shoulders. L. 15½.
Range. Chiefly southwestern United States and southward east to the lower Mississippi Valley.

This is a rare bird east of the Mississippi. It frequents open marshy places and feeds upon small snakes, lizards, grasshoppers, etc., which it captures on the ground. The nest is built in trees, and the 3–5 eggs, heavily marked with brown, are laid in May.

MISSISSIPPI KITE

Ictinia mississippiensis

A slaty-blue bird with black tail and wings and red eyes. L. 14.
Range. Southern United States, north to South Carolina, and southern Indiana; winters chiefly south of the United States and returns in April.

A low-flying hunter of insects, snakes and frogs. It migrates in loose flocks sometimes near the earth, at others far above it. The nest is placed in tall trees. The eggs are laid in May; they number 1–3, and are dull white, occasionally with a bluish tinge.

EVERGLADE KITE

Rostrhamus sociabilis

A dark slate-colored bird with a white rump and a rather slender hooked bill. The young are quite different; black above, tipped with reddish brown, below mottled and barred with black, reddish brown and buff, but with the white rump-patch of the adult. L. 18.
Range. Tropical America north to southern Florida.

The Everglade Kite is found in marshes and about lakes and ponds hunting for its favorite food of large snails, which it extracts from their shells by means of its hooked

bill. It is rarely seen north of southern Florida. The nest is placed in bushes or among reeds. The 2–3 eggs, which are heavily marked with brown, are laid in March.

MARSH HAWK

Circus hudsonius. Case 3, *Fig.* 15

The immature bird and adult female are dark brown above, reddish brown below, but, in any plumage, the species may be known by the white upper tail-coverts which show clearly in flight. L., male, 19; female, 22.

Range. North America, wintering from New Jersey southward; migrates northward in March.

Washington, common W. V., July–Apl. Ossining, tolerably common S. R., Mch. 6–Oct. 30; a few winter. Cambridge, common T. V., Mch. 20–Nov. 10, one breeding record. N. Ohio, not common S. R., Mch. 5–Nov. 30. Glen Ellyn, S. R., several pairs, Apl. 4–Nov. 6. SE. Minn., common S. R., Mch. 6–Nov. 1.

The Marsh Hawk quarters low over the fields turning sharply here and there to follow the course of a meadow mouse in the grass forest below. As a rule the bird is silent but in the mating season he repeats a 'screeching' note. The nest is made on the ground in the marshes; the 4–6 white eggs are laid in May.

SHARP-SHINNED HAWK

Accipiter velox. Case 1, *Figs.* 11, 12; *Case* 3, *Figs.* 7, 8

The sexes differ only in size, the female being much the larger. There is a marked difference in color between adult and immature birds, the latter being more commonly seen. L. male, 11¼; female, 13½.

Range. North America; wintering from Massachusetts southward.

Washington, common P. R. Ossining, common P. R. Cambridge, common T. V., Apl. 3–May 11; Sept. 5–Oct. 25; rare S. R., uncommon W. V. N. Ohio, not common P. R., a few winter. Glen Ellyn, not common S. R., Mch. 19–Dec. 9. SE. Minn., common S. R., Mch. 28–Dec. 28.

This small, bird-killing Hawk dashes recklessly after its victims, following them through thick cover. It is

less often seen in the open than the Sparrow Hawk, which it resembles in size, but from which it may be known by its different color, longer tail, and much shorter wings. It

SHARP-SHINNED HAWK.
Note the Long Tail.

nests in trees 15–40 feet from the ground. The eggs, 3–6 in number, are bluish white or cream, marked with brown and are laid in May.

COOPER'S HAWK

Accipiter cooperi. *Case* 1, *Figs.* 9, 10

A large edition of the Sharp-shinned Hawk, with the tail more rounded, the adult with a darker crown. L. male, 15½; female, 19.

Range. Nests throughout United States; winters from southern New England southward.

Washington, common S. R., less common W. V. Ossining, tolerably common P. R. Cambridge, common T. V., not uncommon S. R., rare W. V., Apl. 10–Oct. 20. N. Ohio, not common, Mch. 20–Nov. 1; a few winter. Glen Ellyn, local S. R., a few winter. SE. Minn., common S. R., Mch. 3.

This is the real 'Chicken Hawk,' but it is less often seen and heard than the soaring, screaming Buteos to which the name is usually applied. It resembles the Sharp-shinned in habits but being larger may prey on larger birds. The female may be easily distinguished from the

Sharp-shinned by her larger size, but the male is not appreciably larger than a female Sharp-shin.

The nest is built in a tree 25–50 feet up. The bluish white, rarely spotted eggs are laid in late April or early May.

GOSHAWK

Astur atricapillus

The adult is blue-gray above with a darker crown and a white line over the eye. The underparts are finely and beautifully marked with gray and white. Young birds resemble the young of Cooper's Hawk, but are much larger. L., male, 22; female, 24.

Range. North America, nests chiefly north of the United States and winters southward, usually rarely, as far as Virginia.

Washington, casual in winter. Ossining, rare W. V., Oct. 10–Jan. 14. Cambridge, irregular and uncommon W. V. SE. Minn., W. R., Nov. 5–Apl. 4.

Like its smaller relatives the Sharp-shin and Cooper's Hawks, this powerful raptor is a relentless hunter of birds. It is particularly destructive to Ruffed Grouse. Fortunately it does not often visit us in numbers. It nests in trees, laying 2–5 white eggs, rarely marked with brownish, in April.

RED-TAILED HAWK

Buteo borealis borealis. *Case* 1, *Figs.* 5, 6; *Case* 3, *Fig.* 13.

This, the largest of our common Hawks, is a heavy-bodied bird with wings which when closed, reach nearly to the end of the tail. The adult has the tail bright reddish brown with a narrow black band near the tip. The immature bird has the tail rather inconspicuously barred with blackish, and a broken band of blackish spots across the underparts. L. male, 20; female, 23.

Range. Eastern North America, migrating only at the northern limit of its range. There are several races, Krider's Red-tail, a paler form inhabiting the great Plains, and Harlan's Hawk, a darker form with a mottled tail, the lower Mississippi Valley.

Washington, common W. V., rare S. R. Ossining, common P. R., less common in winter. Cambridge, rare T. V., locally W. V., Oct. 10–Apl. 20. N. Ohio, common P. R. Glen Ellyn, P. R., not common, chiefly T. V. SE. Minn., common S. R., Mch. 2.

The Red-tail resembles the Red-shoulder in general habits, but it is more a bird of the fields, where it may be seen perched on the limb of a dead tree or similar exposed situation. Its note, a long-drawn, squealing whistle, is quite unlike that of the Red-shoulder. The Red-tail feeds chiefly on mice and other small mammals. With the Red-shoulder it is often called 'Chicken Hawk,' but does not deserve the name. It nests in trees 30–70 feet up and in April lays 2–4 eggs, dull white sparingly marked with brown.

RED-SHOULDERED HAWK

Buteo lineatus lineatus. *Case 1, Fig. 4; Case 3, Fig. 12*

Seen from below the reddish brown underparts and black and white barred tail will identify *adults* of this species. Immature

RED-SHOULDERED HAWK. ADULT.
Note the Barred Tail.

birds are streaked below with blackish; the tail is dark grayish brown indistinctly barred, but the shoulder is always rusty, though this is not a marking one can see in life. L., male, 18½; female, 20½.

Range. Eastern North America from northern Florida to Canada; resident except in the northern part of its range.

Washington, common P. R. Ossining, common P. R. Cambridge, common, Apl.–Nov., less common in winter. N. Ohio, common P. R. Glen Ellyn, P. R., more common than the Red-tail; chiefly T. V.

A medium-sized, heavy-bodied Hawk with wings which, when closed, reach well toward the tip of the tail. It lives both in the woods and open places, and may be flushed from the border of a brook or seen soaring high in the air. Its note, frequently uttered, as it swings in wide circles, is a distinctive *Kèe-you, Kèe-you*, quite unlike the call of any of our other Hawks. It is often well imitated by the Blue Jay. The Red-shoulder feeds chiefly on mice and frogs. It nests in trees 30–60 feet up and, in April, lays 3–5 eggs, white marked with brown.

The Florida Red-shouldered Hawk (*Buteo lineatus alleni*), a smaller form with grayer head and paler underparts, is a resident in Florida and along the coast from South Carolina to Mexico. It nests in February.

BROAD-WINGED HAWK

Buteo platypterus

With a general resemblance to the Red-shouldered Hawk, but smaller; no red on the bend of the wing, or rusty in the primaries, only the outer three of which are 'notched.' L., male, 15¾; female, 16¾.

Range. Eastern North America. Breeding from the Gulf States to the St. Lawrence; winters from Ohio and Delaware to S. A.; migrates northward in March.

Washington, uncommon P. R. Ossining, tolerably common S. R., Mch. 15–Oct. 23. Cambridge, uncommon T. V. in early fall, rare in spring and summer; Apl. 25–Sept. 30. N. Ohio, not common P. R. Glen Ellyn, not common S. R., Apl. 10–Oct. 4. SE. Minn., common S. R., Mch. 11.

A rather retiring, unwary Hawk which nests in thick woods and is less often seen in the open than the Red-shoulder, but, when migrating, hundreds pass high in the air, with other Hawks. Its call is a high, thin, penetrat-

ing whistle. It nests in late April and early May, laying 2–4 whitish eggs marked with brown.

ROUGH-LEGGED HAWK

Archibuteo lagopus sancti-johannis

Legs feathered to the toes; basal half of tail white; belly black. Some individuals are wholly black. L., male, 21; female, 23.

Range. Breeds in northern Canada; usually rare and irregular in the northern U. S., from November to April.

Washington, rare and irregular W. V. Ossining, casual. Cambridge, T. V., not common, Nov.–Dec.; Mch.–Apl. N. Ohio, not common W. V., Nov. 20–Apl. 3. Glen Ellyn, quite common W. V., Oct. 12–Apl. 30. SE. Minn., W. V., Oct. 15–Mch.

Frequents fields and marshes, where it hunts to and fro after mice, which form its principal fare.

GOLDEN EAGLE

Aquila chrysaetos

With the Bald Eagle, largest of our raptorial birds; with a general resemblance to the young of that species, in which the head and tail are dark, but with the legs feathered to the toes. L., male, 32½; female, 37½.

Range. Northern parts of the northern Hemisphere; in the United States, rare east of the Mississippi.

Washington, rare W. V., Ossining, A. V. Cambridge, 1 record. N. Ohio, rare W. V. SE. Minn., P. R.

The Golden Eagle is so rare in the eastern United States and its general resemblance to a young Bald Eagle is so close, that only an experienced ornithologist could convince me that he had seen a Golden Eagle east of the Mississippi.

BALD EAGLE

Haliæetus leucocephalus leucocephalus. *Case* 3, *Fig.* 11

When immature the head and tail resemble the body in color, and at this age the bird is sometimes confused with the more

western Golden Eagle. The latter has the head browner and the legs feathered to the toes. L., male, 33; female, 35½.

Range. North America but rare in the interior and in California, migratory at the northern limit of its range.

Washington, not common P. R. Ossining, common P. R. Cambridge, of irregular occurrence at all seasons. N. Ohio, tolerably common P. R. SE. Minn., P. R., becoming rare.

An adult Bald Eagle will at once be recognized by its white head and tail; the immature birds by their large size. Eagles are usually found near the water where fish may be obtained either on the shore or from the Osprey. The call of the male is a human-like, loud, clear *cac-cac-cac;* that of the female is said to be more harsh and often broken. Eagles nest in tall trees and on cliffs, and lay two or three dull white eggs, in Florida, in November and December; in Maine, in April.

FALCONS, CARACARAS, ETC. FAMILY FALCONIDÆ

GYRFALCON

Falco rusticolus gyrfalco

A large Hawk with long, pointed wings, the upper parts brown with numerous narrow, buffy bars or margins, the tail evenly barred with grayish and blackish, the underparts white lightly streaked with black. L. 22.

Range. Arctic regions; south in winter rarely to New York and Minnesota. The Gray Gyrfalcon (*F. r. rusticolus*) a paler form, with a streaked crown, the Black Gyrfalcon (*F. r. obsoletus*) a slate-colored race, and the White Gyrfalcon (*F. islandus*) are also rare winter visitants to the northern United States.

These great Falcons are so rare in the United States that unless they are seen by an experienced observer, under exceptionally favorable conditions, authentic records of their visits can be based only on the actual capture of specimens.

DUCK HAWK

Falco peregrinus anatum

The adult is slaty-blue above; buff below marked with black, and with black cheek-patches. Immature birds are blackish above margined with rusty, below deep rusty buff streaked with blackish. L., male, 16; female, 19.

Range. Northern Hemisphere, breeding south locally to New Jersey and in Alleghanies to South Carolina; winters from New Jersey southward.

Washington, rare and irregular W. V. Ossining, casual. Cambridge, rare T. V., casual in winter, SE. Minn., uncommon S. R., Apl. 4.

As the Peregrine of falconry we know of the Duck Hawk as a fearless, dashing hunter of greater power of wing and talon. It nests in rocky cliffs in April and from its eyrie darts upon passing Pigeons and other birds. It is most often seen following the coast-line during migrations where it takes toll of Ducks and shore-birds. Three to four heavily marked, brownish eggs are laid in April.

PIGEON HAWK

Falco columbarius

A small Hawk, about the size of a Sparrow Hawk. The adult is slaty blue above, with a rusty collar and a barred, white-tipped tail; below buff, streaked with blackish. Young birds have the upperparts blackish brown. L. 11.

Range. Breeds north of, and winters chiefly south of the United States. Migrates northward in April and May, and southward in September and October.

Washington, not uncommon T. V. Ossining, tolerably common T. V., Apl. 1–May 11; Aug. 10–Oct. 15. Cambridge, common T. V., Apl. 25–May 5; Sept. 25–Oct. 20; occasional in winter. N. Ohio, rare P. R. Glen Ellyn, regular but rare T. V., Apl. 26–May 5; Sept. 10–Oct. 16. SE. Minn., Apl. 13.

We know this Hawk as a not common migrant generally seen in open places and along the shores. It feeds chiefly on small birds.

SPARROW HAWK

Falco sparverius sparverius. *Case* 1, *Figs.* 7, 8; *Case* 3, *Figs.* 5, 6

The male has the tail with only one bar; the breast unmarked; the abdomen with black spots; while the female has the tail with several bars, the underparts streaked with brownish. In both sexes the bright reddish brown of the upperparts, black markings about the head, and small size are gold field characters. L. 10.

Range. Sparrow Hawks are found throughout the greater part of the Western Hemisphere. Our eastern race inhabits the region east of the Rockies and is migratory at the northern limit of its range. Southern Florida specimens are slightly smaller and darker and are known as the Florida Sparrow Hawk (*F. s. paulus*).

SPARROW HAWK HOVERING ABOVE ITS PREY.

Washington, common W. V., rare S. R. Ossining, rather rare P. R. Cambridge, P. R., common in summer, rare in winter. N. Ohio, common P. R. Glen Ellyn, rather rare S. R., Mch. 10–Oct. 26.

The Sparrow Hawk is one of our commonest and most familiar Hawks. He is a handsome little Falcon, and though his prey is chiefly humble grasshoppers, he captures them in a sportsmanlike manner by "waiting on" or hovering on rapidly beating wings over his game and dropping on it with deadly aim. His call is a high, rapidly repeated *Killy-killy-killy*. The three to seven eggs, finely marked with reddish brown, are laid in a hollow limb or similar situation in April.

AUDUBON'S CARACARA

Polyborus cheriway cheriway

A falcon-like Vulture with a bare face, black cap, white throat, breast and nape; the rest of the plumage is black, the tail barred with white. L. 22.

Range. Mexican border and southward; south central Florida.

In the eastern United States the Caracara is found only in the Kissimmee prairie region of southern Florida where its presence, so far from others of its kind, furnishes one of the problems in distribution which stimulate the imagination of the faunal naturalist.

OSPREYS. FAMILY PANDIONIDÆ

OSPREY

Pandion haliætus carolinensis. Case 3, Fig. 14

The Osprey or Fish Hawk is often miscalled 'Eagle,' but it is a smaller bird with white, instead of blackish underparts. L. 23.

Range. The Osprey is found throughout the greater part of the world; the American form occurs in both North and South America and winters from the southern United States southward, starting northward in March.

Washington, uncommon S. R., Mch. 19–Nov. 30. Ossining, common T. V., rare S. R., Apl. 3–May 26; Sept. 29–Oct. 20. Cambridge, rather common T. V., Apl.–May; Sept.–Oct. N. Ohio, rare S. R., Apl. 20–Oct. Glen Ellyn, two records, May and Sept.

The Osprey, or Fish Hawk, feeds on fish and nothing but fish. He is, therefore, never found far from his fishing grounds, where no one who has seen him plunge for his prey and rise with it from the water will doubt his ability to supply his wants. Ospreys usually nest in trees at varying distances from the ground, but sometimes on cliffs or even on the ground its lf, and return year after year to the same nest. The Osprey's alarm note is a high, loud, complaining whistle, frequently repeated. The eggs are

laid in late April and early May. They are usually four in number, buffy white, heavily marked with chocolate.

BARN OWLS. FAMILY ALUCONIDÆ

BARN OWL

Aluco pratincola pratincola. Case 3, *Fig.* 17

A light-colored Owl, looking almost white in the dusk. L. 18.
Range. Barn Owls are found throughout the world. Our species is rare north of New Jersey and Ohio. It is migratory only at the northern limit of its range.
Washington, not rare P. R. Ossining, A. V.

This is the 'Monkey-faced Owl' of towers and steeples. Few who hear its loud, sudden scream or rapidly repeated *crree-crree-crree* know their author, who may live for years in the heart of a village a stranger to its human inhabitants. The mice, however, have tragic evidence of his presence in the nightly raids he makes upon their ranks. The nest is made in the diurnal retreat, 5–9 white eggs being laid in April.

HORNED OWLS, HOOT OWLS, ETC. FAMILY STRIGIDÆ

LONG-EARED OWL

Asio wilsonianus. Case 1, *Fig.* 17

Distinguished by very long ear-tufts. L. 14¾.
Range. Temperate North America. Winters south to Georgia and Louisiana.
Washington, common P. R. Ossining, common P. R. Cambridge, rare, P. R. but sometimes common in fall and winter. N. Ohio, uncommon P. R. Glen Ellyn, rare, fall records only, Nov. 7–Dec. 14.

An Owl of evergreen clumps and dense growths, where its presence is often betrayed by the litter below of undi-

gested pellets of hair and bones which Owls eject at the mouth. It is not a "hoot" Owl, and even many ornithologists have not heard its notes, which are described as a "soft-toned, slow *wu-hunk*, *wu-hunk*, and a low twittering, whistling *dicky*, *dicky*, *dicky*." It is not a hole-inhabiting Owl and like the Great Horned nests in an old Hawk, Crow, or Squirrel nest. Three to six white eggs are laid in April.

SHORT-EARED OWL

Asio flammeus. Case 1, *Fig.* 18

The 'ears' are barely evident, the eyes are yellow; underparts streaked. L. 15½.

Range. Found throughout the greater part of the world; migrating southward at the northern part of its North American range.

Washington, common W. V. Ossining, casual. Cambridge, T. V., Mch. 15–Apl. 15, rare; Oct.–Nov., uncommon. N. Ohio, uncommon P. R. Glen Ellyn, rare, Dec. 11–May 15. SE. Minn., common S. R.

This is a marsh Owl and we are therefore not likely to find it associated with other members of its family. Its notes are said to resemble the *ki-yi* of a small dog. Four to seven white eggs are laid in an open nest in the grasses in April.

BARRED OWL

Strix varia varia. Case 1, *Fig.* 15

A large Owl with black eyes (the figure is incorrect) and no 'ears.' L. 20.

Range. Eastern North America. Generally a Permanent Resident. The Florida Barred Owl (*S. v. alleni*, Case 3, Fig. 16), is somewhat darker than the northern form and has nearly naked toes. It inhabits Florida and the coast region from South Carolina to Texas.

Washington, not common, rare P. R. Ossining, rare P. R. Cambridge, P. R., sometimes common in Nov. and Dec. N. Ohio, common P. R. Glen Ellyn, rare and local P. R. SE. Minn., common P. R.

An Owl of the woods, common in the less thickly settled parts of its range. Its loud, sonorous notes, *whoo, whoo-whoo who-whoo, to-whoo-ah,* are often uttered. When two birds come together their united calls produce some of the most startling sounds to be heard in nature. The Barred Owl feeds chiefly on mice. It nests in hollow trees in March, laying 2–4 white eggs.

GREAT GRAY OWL

Scotiaptex nebulosa nebulosa

Largest of American Owls, with a general resemblance to the Barred Owl, but nearly a third larger and with yellow eyes. L. 27.

Range. Northern North America, rarely straggling to United States in winter.

Cambridge, very rare and irregular W. V. SE. Minn., rare W. V.

RICHARDSON'S OWL

Cryptoglaux funerea richardsoni

A small Owl about the size of a Screech Owl, but without ear-tufts. It is grayish brown above and both head and back are spotted with black; the underparts are white heavily streaked with grayish brown.

Range. Northern Canada and Alaska, rarely visiting the eastern United States in winter. We are not likely to meet this Owl.

Cambridge, very rare W. V.

SAW-WHET OWL

Cryptoglaux acadica acadica. Case 2, Fig. 41

Smallest of our Owls; eyes yellow, no ear-tufts. L. 8.

Range. Nests in the northern United States and northward, south in the Alleghanies to Maryland; winters rather rarely and irregularly southward to Virginia.

Washington, rare W. V., Oct.–Mch. Ossining, rather rare W. V., Oct. 28–Jan. 13. Cambridge, not uncommon, W. V., Nov.–Mch. N. Ohio, rare P. R. SE. Minn., uncommon, P. R.

A tame little Owl which sometimes may be caught in one's hand. It passes the day in dense growth, usually

evergreens. Its note resembles the "sound made when a large-tooth saw is being filed."

SCREECH OWL

Otus asio asio. Case 1, *Figs.* 13, 14

The two sexes are alike, the two color phases being individual and representing dichromatism. Among animals, gray and black squirrels furnish a similar case. The ear-like feather-tufts give the bird a cat-like appearance, hence the name 'Cat Owl.' The young are downy-looking creatures evenly barred with dusky. L. 9½.

Range. Screech Owls are found throughout the greater part of the Western Hemisphere. Our eastern form occurs in the eastern United States from Canada southward. The Florida race (*O. a. floridanus*, Case 3, Fig. 19) is smaller and of a darker gray than the northern bird. The 'red' phase is rare.

Washington, common P. R. Ossining, common P. R. Cambridge, common P. R. N. Ohio, common P. R. Glen Ellyn, common P. R. SE. Minn., common P. R.

This, the smallest of our 'horned' Owls, is also the commonest. It lives near and sometimes in our homes even when they are situated in towns. Its tremulous, wailing whistle (in no sense a 'screech') is therefore one of our most characteristic twilight bird-notes. Mice and insects form the greater part of the Screech Owl's fare. Four to six white eggs are laid in a hollow tree, bird-box, or similar site in April.

GREAT HORNED OWL

Bubo virginianus virginianus. Case 1, *Fig.* 16

Largest of the 'horned' Owls. L. 22.

Range. Western Hemisphere in many forms; our form is confined to the eastern United States. A Permanent Resident.

Washington, rare P. R. Ossining, tolerably common P. R. Cambridge, uncommon, autumn or winter. N. Ohio, rare P. R. SE. Minn., common P. R.

The Great Horned Owl retreats before the civilization that destroys the forests in which it lives. In thinly

settled regions its deep-toned, monotone, *whoo-hoo-hoo-hoo, whooo, whooo* is still a characteristic bird voice, but most of us hear it only when we camp in the wilderness. The bird's fierce nature has won for it the name of "tiger among birds." Rabbits, skunks, game birds and smaller prey form its fare. The 2-3 white eggs are laid in an abandoned Hawk, Crow, or squirrel nest in February; it is the first of our northern birds to nest.

SNOWY OWL

Nyctea nyctea

A large Owl with no 'ear' tufts and yellow eyes; chiefly white with small brownish or blackish markings. L. 25.

Range. Nests in Arctic regions, migrating southward irregularly in winter to the northern United States.

Washington, casual W. V. Ossining, A. V. Cambridge, rare and irregular W. V. N. Ohio, rare W. V. Glen Ellyn, very rare W. V. SE. Minn., common W. V., Oct.–Apl.

A rare winter visitant which is more often seen along the seashore. Unlike most Owls it hunts by day, feeding chiefly on mice but also on birds.

HAWK OWL

Surnia ulula caparoch

A medium-sized Owl with a whitish face and yellow eyes and a *long, rounded* tail; the head is spotted, the back barred with whitish; the underparts are barred with white and blackish. L. 15; T. 7½.

Range. Northern North America, rarely visiting the northern United States in winter.

Cambridge, very rare in late fall. N. Ohio, rare W. V. SE. Minn., uncommon W. V., Oct.–Mch.

"The Hawk Owl is strictly diurnal, as much so as any of the Hawks, and like some of them often selects a tall shrub or dead-topped tree in a comparatively open place for a perch, where it sits in the bright sunlight watching for its prey" (Fisher).

FLORIDA BURROWING OWL

Speotyto cunicularia floridana

A small, ground Owl, with nearly naked legs and feet and no ear-tufts. The upperparts are grayish brown marked with white; the throat is white, rest of underparts barred with grayish brown and white. L. 9.

Range. Southern Florida, chiefly in the Kissimmee Prairie region.

This is a representative of our western Burrowing Owl, which, in some way unknown to man, has established itself far from others of its kind in central southern Florida, where it is locally common. It nests in a hole in the ground, excavated by itself, and lays 5–7 white eggs in March.

PARROTS, MACAWS, PAROQUETS, COCKATOOS. ORDER PSITTACI

PARROTS AND PAROQUETS. FAMILY PSITTACIDÆ

CAROLINA PAROQUET

Conuropsis carolinensis carolinensis

A long-tailed, green Paroquet with a yellow head, orange forehead and cheeks. L. 12½.

Range. Formerly southeastern United States north to Virginia, west to Nebraska and Texas; now southern Florida where it is on the verge of extinction, if not extinct.

Washington, extinct, known only from specimens shot in Sept., 1865.

The Paroquet has paid the penalty of wearing bright plumes, of making a desirable cage-bird, of being destructive to fruit, and of having little fear of man. Once abundant and wide-spread, for nearly the past half a century it has been restricted to Florida, where the species will

soon go out of existence, if it has not already done so. Its nesting habits are unknown.

CUCKOOS, KINGFISHERS, ETC. ORDER COCCYGES

CUCKOOS, ANIS, ETC. FAMILY CUCULIDÆ

YELLOW-BILLED CUCKOO

Coccyzus americanus americanus. Case 7, Fig. 1

Broadly white-tipped tail-feathers, a partly yellow bill, and largely reddish brown primaries distinguish this species from its black-billed cousin. L. 12¼, of which one-half is tail.

Range. Nests from northern Florida to Canada; winters in tropical America, returning to the United States in April.

Washington, common S. R., May 3–Oct. 13. Ossining, common S. R., May 4–Oct. 31. Cambridge, common S. R., May 12–Sept. 15. N. Ohio, common S. R., Apl. 20–Sept. 25. Glen Ellyn, quite common S. R., May 15–Sept. 29. SE. Minn., common S. R., May 21–Aug. 20.

Cuckoos are common birds, but are more often heard than seen. Their notes are not like those of the cuckoo clock, which exactly imitates the voice of the European Cuckoo, but a series of *cuck-cuck-cucks* and *cow-cows* repeated a varying number of times. The Cuckoo rarely makes long flights but slips from one tree to another, seeking at once the inner branches and avoiding an exposed perch. The nest, a platform of sticks, thinly covered, is placed in low trees or bushes. The 3–5 greenish blue eggs are laid in May.

BLACK-BILLED CUCKOO

Coccyzus erythrophthalmus. Case 7, Fig. 2

A wholly black bill (note that in both our Cuckoos it is slightly curved), wings without reddish brown, and small, inconspicuous

white tips to the tail-feathers distinguish this species from the preceding.

Range. A more northern species than the Yellow-billed Cuckoo. Nests from Virginia (Georgia in the mountains) to Quebec; winters in tropical America, reaching the southern States in April.

Washington, rather rare S. R., May 5–Oct. 6. Ossining, common S. R., May 3–Oct. 7. Cambridge, common S. R., May 12–Sept. 20. N. Ohio, tolerably common S. R., May 1–Sept. 25. Glen Ellyn, S. R., May 5–Oct. 21. SE. Minn., common S. R., May 8–Sept. 27.

The day after penning the foregoing notes on the Yellow-billed Cuckoo, I saw a Black-bill make a prolonged, dashing flight through the open, alight on the limb of a dead, leafless tree, directly over a young girl who was calling loudly to an active dog near her, and from this conspicuous perch utter its low *coo-coo* notes, both looking and sounding more like a Dove than a conventional Cuckoo. So while we may say that the Cuckoos are much alike in habits one must not accept generalized statements too literally. There is much individuality among birds, a fact that makes their study far more interesting than if all were cast in the same mold.

The notes of this species are softer than those of the Yellow-bill, but the difference between the calls of the two species must be learned from the birds, not from books. The nest of the Black-bill is the more compactly built of the two, and its eggs are of a deeper shade.

KINGFISHERS. FAMILY ALCEDINIDÆ

BELTED KINGFISHER

Ceryle alcyon. *Case* 3, *Fig.* 18; *Case* 5, *Fig.* 10.

The female resembles the male, but the sides and the band across the breast are reddish brown. This is our only Kingfisher. Crest, color, size, habits, all distinguish him. L. 13.

Range. North America; winters from Illinois and Virginia southward; migrates north in early April.

Washington, common P. R., except in midwinter. Ossining, common S. R., Apl. 1–Nov. 23; casual in winter. Cambridge, common S. R., Apl. 10–Nov. 1; rare W. V. N. Ohio, common S. R., Mch. 20–Nov. 1; rare W. V. Glenn Ellyn, isolated pairs, Apl. 1–Nov. 19. SE. Minn., common S. R., Mch. 21–Dec. 12.

The Belted Kingfisher is a watchman of the waterways who sounds his loud rattle when we trespass on his territory, a gallant fisherman, who, like a Falcon 'waits on' with fluttering wing, and the moment his aim is taken plunges headlong with a splash on some fish that has ventured too near the surface.

The nest is made at the end of a burrow in a bank; 5–8 white eggs are laid in May.

WOODPECKERS, WRYNECKS, ETC. ORDER PICI

WOODPECKERS. FAMILY PICIDÆ

IVORY-BILLED WOODPECKER

Campephilus principalis

Our largest Woodpecker, black with a white stripe down each side of the neck, white showing in the wing in flight, the male with a flaming red crest, the female with a black one and both with an ivory-white bill. L. 20.

Range. Formerly southeastern United States to North Carolina; now rare and local in the wilder, less settled portions of the Gulf States.

When man appears, the Ivory-bill disappears. This is not alone due to the destruction of the birds' haunts but to the bird's shy, retiring nature. Its days are numbered even more surely than are those of the forests it inhabits.

The nesting cavity is usually made in a cypress some forty feet from the ground, and 3–5 white eggs are laid in March.

HAIRY WOODPECKER

Dryobates villosus villosus. Case 2, Figs. 28, 29

The Hairy is a large edition of the Downy with white, unmarked outer tail-feathers. The male has a red head-band. L. 9½.

Range. Middle and northern states; a permanent resident. The southern Hairy Woodpecker (*D. v. auduboni*) inhabits the southeastern United States north to southern Virginia. It is smaller than the Hairy and has less white in the plumage. L. 8 1/10.

The Northern Hairy Woodpecker (*D. v. leucomelas*) is found from the northern United States northward. It is larger and whiter than the Hairy. L. 10.

The Newfoundland Hairy Woodpecker (*D. v. terrænovæ*) is larger and darker than the Hairy; it inhabits Newfoundland.

Washington, rare P. R. Ossining, rare P. R. Cambridge, uncommon W. V., one summer record. N. Ohio, common P. R. Glen Ellyn, fairly common P. R.

The Hairy is not so common as his small cousin the Downy, and does not so readily make friends. He prefers the woods to our orchards and is for these reasons less often seen at our feeding-stands. The Hairy's notes are noticeably louder than the Downy's. The nest-hole is usually in a dead tree. The 2–4 white eggs are laid the last half of April.

DOWNY WOODPECKER

Dryobates pubescens medianus. Case 2, Figs. 26, 27

The Downy differs from the Hairy Woodpecker in color by having the outer tail-feathers with black bars, but it is the bird's obviously smaller size that will serve to distinguish it. L. 6¾.

Range. From Virginia northward into Canada. A Permanent Resident. The Southern Downy Woodpecker (*D. p. pubescens*, Case 3, Fig. 25) is smaller, darker below and with the white markings smaller. L. 6. It inhabits the south Atlantic and Gulf States north to North Carolina.

Washington, common P. R. Ossining, common P. R. Cambridge, common P. R. N. Ohio, common P. R. Glen Ellyn, common P. R. SE. Minn., common P. R.

Our commonest Woodpecker; an alert, active little driller for insects and their eggs and larvæ, and frequent

visitor to our lunch-counters, particularly if we supply them with suet. His sharp *peek*, *peek*, running at times into a diminishing string of *peeks*, and his rolling tatoo, as he pounds a limb with amazing rapidity, are prominent parts of every-day bird language, the tatoo being a 'song' of the breeding season.

Four to six white eggs are laid in a hole, usually in a dead tree, the first week in May. The Southern Downy nests in April.

RED-COCKADED WOODPECKER

Dryobates borealis

Between the Downy and Hairy in size (L. 8½) with a general resemblance to both, but the male with a small tuft of red feathers on each *side* of the back of the head.

Range. Southeastern States north to North Carolina.

An inhabitant of the pine woods, who utters a coarse *yank-yank* note and may at times be seen feeding from the terminal tufts of pine 'needles' in the higher branches. The nest is usually in a living pine; the 2–5 white eggs are laid in April.

ARCTIC THREE-TOED WOODPECKER

Picoides arcticus

Two toes in front and one behind, a solid black back and an orange-yellow crown in the male distinguish this from all our other Woodpeckers. Size of the Hairy, L. 9½.

Range. Canada, and northern parts of our border states, rarely south in winter, as far as Nebraska and Ohio.

Cambridge, one record. N. Ohio, rare W. V. SE. Minn., rare.

An inhabitant of the spruce and balsam forests of our northern states, occasionally straggling southward in winter. Nests in May.

THREE-TOED WOODPECKER

Picoides americanus americanus

Two toes in front and one behind, an orange-yellow crest in the male, and a black back *closely and evenly barred with white* distinguish this bird; it is somewhat smaller than the preceding. L. 8¾.

Range. Canada, south to the northern parts of our boundary states; unknown south of Massachusetts.

Not so common as the Arctic Three-toed Woodpecker, and less often found south of its breeding range. Nests in early June.

YELLOW-BELLIED SAPSUCKER

Sphyrapicus varius varius. *Case* 3, *Fig.* 26; *Case* 5, *Fig.* 30

The female has the throat white, and rarely, crown wholly black. Young birds have the throat whitish, crown dull black, breast brownish. The black breast-patch and red forehead, and red or white throat are distinguishing characters. L. 8½.

Range. Nests from northern New England and Minnesota (in Alleghanies from North Carolina) to Canada; winters from Pennsylvania (rarely) southward to the Gulf States.

Washington, common T. V., Mch.–May; Sept. and Oct., occasional in winter. Ossining, common T. V., Apl. 5–May 13; Sept. 18–Oct. 23; casual in winter. Cambridge, not uncommon T. V., Apl. and Sept. 15–Nov. 1; occasional W. V. N. Ohio, common T. V., Apl. 1–May 20; Sept. 15–Oct. 20. Glen Ellyn, common T. V., Mch. 31–May 12; Sept. 14–Oct. 13. SE. Minn., common S. R., Mch. 25–Oct. 19.

This is the mysterious maker of the rows of little holes drilled in even lines, like hieroglyphics, on the trunks of apple and other trees. Using his brush-tipped tongue as a swab, he drinks the sap that oozes from these punctures.

As a migrant the Yellow-belly is not conspicuous. His business takes him into the heart of living trees and he is usually seen only when flying from one to another. His 'low 'snarling' note attracts the attention of only the observant.

The nest-hole is 25–40 feet up; the 5–7 white eggs are laid in May.

PILEATED WOODPECKER

Phlœotomus pileatus pileatus

Next to the nearly extinct Ivory-bill this is the largest of our Woodpeckers. (L. 17.) Both sexes have a flaming red crest (reaching the forehead in the male) the remainder of the plumage being black, with the throat, a stripe from the bill down the sides of the neck, and the basal half of the wing-feathers white; bill horn-color.

Range. Southeastern and Gulf States, north to North Carolina. The Northern Pileated Woodpecker (*P. p. abieticola*) is found thence northward into Canada and west to the Pacific. It is a larger bird, with the white areas larger.

In the south the Pileated is by no means rare and seems not averse to the presence of man; but in the north he retires to the wilder forested areas and we are apt to see him only when we go a-camping. And he is well worth seeing with his flaming crest and powerful bill which, used either as a chisel or drum-stick, produces impressive results. Strangely enough the Pileated's notes resemble those of the Flicker but are louder.

The nest is usually well up; the 3–5 white eggs are laid in April in the south, in May in the north.

RED-HEADED WOODPECKER

Melanerpes erythrocephalus. Case 3, *Figs.* 21, 22; *Case* 6, *Fig.* 43

Adults of both sexes have the whole head red; young, during their first winter, have the head grayish brown, and a black band across the white wing-feathers. L. 9¼.

Range. Eastern United States, west to Rockies; local east of the Alleghanies and north of Pennsylvania.

Washington, rather common S. R., rare W. V. Ossining, rare P. R., common in fall, Aug. 27–Oct. 12. Cambridge, irregular at all seasons; sometimes common in fall. N. Ohio, common S. R., Apl. 20–Sept. 25; occasionally winters. Glen Ellyn, common S. R., Feb. 19–Nov. 6; a few winter. SE. Minn., common S. R., Apl. 4–Sept. 17; rare in winter.

Adding to the normal habits of a Woodpecker marked skill as a flycatcher, the Red-head stops his grub-hunting

and swings out after a passing insect with a dazzling display of red, white and blue-black. Noisy as he is conspicuous, he beats his log-drum, rolls a tree toad-like *krrring*, or, with tireless persistency utters a whistled croak. In the northeastern states Red-heads are distributed irregularly. They are rarely common in the summer, but in the fall they sometimes appear in numbers. Whenever they come we are soon aware of their presence.

The nest is generally in a dead tree; the 4–6 white eggs are laid in May.

RED-BELLIED WOODPECKER

Centurus carolinus. *Case* 3, *Fig.* 23

Back and wings evenly barred with black and white, hence the name 'Zebra'; the female and young have the front part of the crown gray. L. 9½.

Range. Eastern United States, north to southern Pennsylvania, western New York and southern Minnesota; casually further.

Washington, locally common P. R. Cambridge, A. V., one record. N. Ohio, tolerably common P. R. SE. Minn., uncommon P. R.

A common, hoarse-voiced resident of orange groves and gardens who with a *chuh-chuh*, jerkily hitches himself upward in the routine of the daily grub hunt. It is rare at the northern part of its range, but resident wherever found. The nest is in dead or living trees; the 4–6 white eggs are laid in late April of early May.

NORTHERN FLICKER

Colaptes auratus luteus. *Case* 2, *Figs.* 21, 22; *Case* 3, *Fig.* 20

The white rump and yellow wing-linings, displayed in flight; black breast-crescent, spotted underparts and fairly large size, readily distinguish this beautiful bird. The female very properly lacks the male's 'moustache.' L. 12.

Range. Eastern North America, from North Carolina and southern Illinois to Canada and Alaska. The Southern Flicker

(*C. a. auratus*) a smaller, darker race, inhabits the South Atlantic and Gulf States.

Washington, common S. R., rare W. V. Ossining, common S. R., Mch. 25–Oct. 30; a few winter. Cambridge, very common S. R., common W. V. N. Ohio, common S. R., Mch. 10–Nov. 15; a few winter. Glen Ellyn, common S. R., Mch. 7–Dec. 24; a few winter. SE. Minn., common S. R., Mch. 21–Oct. 16.

Thirty years ago the Flicker, High-hole or Yellow-hammer, was prey of any boy with a gun and was correspondingly wild and little known; now, thanks to the Audubon Society, he is almost as domestic as the Robin. In search of ants and their eggs, he hunts our lawns and even accepts the hospitality of our nest-logs. A great acquisition to our dooryard life is this bird of beautiful colors, quaint habits, and strange notes. His loud, strongly accented call, *kēe-yer*, his rapidly repeated mellow *weēchew*, *weēchew*, possess character even if they lack musical quality.

The Flicker nests in holes and lays from 5–9 white eggs in late April or early May.

GOATSUCKERS, SWIFTS, HUMMINGBIRDS. ORDER MACROCHIRES

NIGHTHAWKS, WHIP-POOR-WILLS, ETC. FAMILY CAPRIMULGIDÆ

CHUCKWILL'S WIDOW

Antrostromus carolinensis. Case 6, Fig. 40

A larger, browner bird than the Whip-poor-will, with branched, not simple bristles at the sides of the bill. Breast-patch whiter in the male than in the female. L. 12.

Range. Southern states north to Virginia; wintering from southern Florida southward and migrating northward in March.

Washington, one record. Cambridge, A. V., one record, Dec.

What the Whip-poor-will is to the north the Chuck-will is to the south. The difference in their names expresses

the syllabic difference in their calls, but the Chuck-will's notes are uttered more evenly and lack the marked accent on the first "Whip" of its northern cousin's song.

The Chuck-will lays its two eggs in April on the ground in the woods, where it lives. They are white with delicate lilac markings and a few brownish spots.

WHIP-POOR-WILL

Antrostomus vociferus vociferus. *Case* 6, *Fig.* 41

Outer wing-quills barred with rusty, breast-band white in the male, buff in the female. L. 9¾.

Range. Breeds from northern Georgia north to Canada, winters from the Gulf States southward, starting north in April.

Washington, common S. R., Apl. 13–Oct. 13. Ossining, common S. R., Apl. 19–Oct. 17. Cambridge, formerly S. R., now chiefly T. V., Apl. 30–Sept. 20. N. Ohio, locally common S. R., Apl. 29–Sept. 15. Glen Ellyn, rare, spring records only, Apl. 19–May 21. SE. Minn., common S. R., Apl. 17–Sept. 28.

A mysterious, silent, flitting shadow, should we chance to arouse it from its sleep in the forest by day, at dusk the Whip-poor-will takes the center of the stage and announces his presence to the world. *Whip-poor-will, whip-poor-will* he calls with a snap and a swinging rhythm that makes the twilight ring with the oft-repeated notes.

Two eggs are laid on the ground in the woods in May. They are dull white with delicate obscure lilac markings, and a few brownish gray spots.

NIGHTHAWK

Chordeiles virginianus virginianus. *Case* 6, *Fig.* 39

A white mark across the black outer wing-quills is very conspicuous in flight; seen from below it suggests a hole in the bird's wing. The female has the throat buff and no white band in the tail. L. 10.

Range. Eastern North America from the Gulf States and Georgia north to Canada and Alaska. Winters in the tropics coming north in April. The Florida Nighthawk (*C. v. chapmani*) a smaller race (L. 8½) is a Summer Resident in the Gulf States.

Washington, not common S. R.; abundant T. V., Apl. 19–Oct. 8. Ossining, common S. R., May 9–Oct. 11. Cambridge, rare S. R., common T. V., May 15–Sept. 25. N. Ohio, locally common S. R., May 1–Sept. 20. Glen Ellyn, not common S. R., common T. V., May 1–Oct. 14. SE. Minn., common S. R., May 4–Sept. 30.

Doubtless because we see the Nighthawk and only hear the Whip-poor-will the notes of the latter have been often attributed to the former, with the result that many people think there is but one species. While it is true that there is a general resemblance in form, in details of color and markings, the two birds are quite unlike, while so far as notes and habits are concerned, few members of the same family differ more. The Whip-poor-will haunts the shadows of the woods and rarely flies far above the ground, the Nighthawk, like a Swift, courses high in the open, even over city house-tops, where anyone who looks may see him. The Whip-poor-will's notes have made him famous, the Nighthawk calls only a nasal *peent, peent*, and, diving earthward on set wings, produces a hollow, booming sound. Both nest on the ground, but the Nighthawk lays in the fields or on pebbly roofs, and its two finely marked eggs (laid in May or June) are quite unlike those of the Whip-poor-will.

SWIFTS. FAMILY MICROPODIDÆ

CHIMNEY SWIFT

Chætura pelagica. Case 6. Fig. 42

A near relative of the Hummingbird, not of Swallows. Note the 'spine'-tipped tail-feathers.

Range. Eastern North America; winters in Central America; reaches the Gulf States in March.

Washington, abundant S. R., Apl. 6–Oct. 27. Ossining, common S. R., Apl. 19–Oct. 23. Cambridge, abundant S. R., Apl. 25–Sept. 20. N. Ohio, abundant S. R., Apl. 10–Oct. 20. Glen

Ellyn, common S. R., Apl. 16–Sept. 29. SE. Minn., common S. R., Apl. 20–Sept. 18.

A twittering courser of evening skies who makes his home in our chimneys. Here the bracket-like nest of dead twigs is attached to the bricks by the bird's saliva, to be loosened, at times, after heavy rains and fall to the fire-place below. In the fall great flocks roost in chimneys, generally large ones, returning night after night.

The 4–6 white eggs are laid in May.

HUMMINGBIRDS. FAMILY TROCHILIDÆ

RUBY-THROATED HUMMINGBIRD

Archilochus colubris. Case 7, Figs. 4, 3

Females and young lack the 'ruby' throat.

Range. Eastern North America, nesting from Florida to Quebec; winters from central Florida to Panama.

Washington, common S. R., Apl. 23–Oct. 23. Ossining, common S. R., Apl. 30–Oct. 3. Cambridge, very common T. V., uncommon S. R., May 10–Sept. 20. N. Ohio, common S. R., May 1–Sept. 15. Glen Ellyn, rare S. R., May 1–Sept. 22. SE. Minn., common S. R., May 19–Oct. 8.

Any Hummingbird seen east of the Mississippi may, with confidence, be called a Ruby-throat; exceptions will probably prove to be sphinx moths, which, it must be confessed, look singularly hummingbird-like as they hover before flowers. When the eggs are laid the male deserts the female, leaving to her the task of incubation and care of the young.

The nest, most exquisite of bird homes, is saddled to a limb usually 15 or more feet up. The two bean-like white eggs are laid in May.

PERCHING BIRDS. ORDER PASSERES

FLYCATCHERS. FAMILY TYRANNIDÆ

KINGBIRD

Tyrannus tyrannus. Case 7, Fig. 6

Note the white-tipped tail; young birds lack the orange crest. L. 8½.

Range. North America; nests from northern Florida to Canada; winters in South America, reaching Florida in March.

Washington, common S. R., Apl. 18–Sept. 23. Ossining, common S. R., Apl. 29–Sept. 10. Cambridge, common S. R. May 5–Sept. 1. N. Ohio, common S. R., Apl. 20–Sept. 15. Glen Ellyn, fairly common S. R., Apl. 16–Sept. 6. SE. Minn., common S. R., Apl. 26–Aug. 31.

A valiant defender of his home who, at the approach of Crow or Hawk, utters his steely, chattering, battle-cry and sallies forth to attack. Fearlessly he plunges down on an enemy many times his size who dodging this way and that beats a hasty retreat before his active, aggressive assailant. In the fall migration Kingbirds gather in loose flocks.

The nest is placed near the end of a branch about 20 feet up; the 3–5 white eggs spotted with dark brown, are laid in May.

GRAY KINGBIRD

Tyrannus dominicensis dominicensis. Case 7, Fig. 7

Resembles the Kingbird but is lighter gray, and the tail lacks the conspicuous white tip.

Range. West Indies, nesting north through Florida to southeastern South Carolina; winters to South America; reaches Florida early in May.

A not uncommon summer resident in parts of Florida and the coastal region of Georgia and South Carolina, with the general habits and appearance of our Kingbird,

but with a quite different call which suggests the words *pittrri-pittrri*. It nests in May, laying four salmon-colored eggs, marked with dark brown and lilac.

CRESTED FLYCATCHER

Myiarchus crinitus. Case 7, Fig. 5

The reddish brown tail-feathers may sometimes be seen and the crest is usually evident. L. 9.

Range. Eastern North America; nests from Florida to Canada; winters in the tropics, reaching Florida on its northward journey in March.

Washington, very common S. R., Apl. 20–Sept. 29. Ossining, common S. R., May 7–Sept. 12. Cambridge, rare S. R., May 15–Sept. 11. N. Ohio, common S. R., Apl. 25–Sept. 15. Glen Ellyn, not common S. R., May 1–Sept. 18. SE. Minn., common S. R., Apl. 25.

A character of the woods distinguished alike by appearance, voice and habits. His crested head seems too big for his body; his exclamatory whistle, which sounds like a shout above a monotone of conversation, his habit of always lining his nest with a cast-off snake skin, all mark him as an odd genius. Even his wife's eggs, with their long chocolate streaks, are quite unlike any other birds' eggs. They are laid in a hole in a tree in May or June.

PHŒBE

Sayornis phœbe. Case 4, Fig. 52; Case 5, Fig. 15

Head slightly crested, somewhat darker than body. In the fall the underparts are tinged with yellow. L. 7.

Range. Eastern North America; nests from northern Mississippi and northwestern Georgia to Canada; winters from South Carolina to Mexico. The only Flycatcher to winter in the eastern United States and hence the first to reach us in the spring.

Washington, common S. R., Feb. 25–Oct.; occasionally winters. Ossining, common S. R., Mch. 14–Oct. 29. Cambridge, common T. V., and not uncommon S. R., Mch. 25–Oct. 10. N. Ohio, common S. R., Mch. 14–Oct. 15. Glen Ellyn, S. R., Mch. 13–Oct. 6. SE. Minn., common S. R., Mch. 22–Oct. 11.

The Phœbe is the best known member of a group of small Flycatchers which the beginner, and not infrequently the advanced student, names with more or less uncertainty. Fortunately for the field student, and as if to compensate for their close resemblance in plumage, they all possess distinctive, quite unlike, and easily recognizable calls, and consequently can readily be identified by their voices if not by their colors.

The Phœbe shows so marked a fondness for our society, nesting under our piazzas, in barns or outbuildings, and calls his *pewit-phœbe* so plainly, wagging his tail the while in a friendly, sociable kind of a way, that there is never any doubt about his identity; but we will not make the acquaintance of his less common, less confiding relatives so readily.

The Phœbe's 4–6 white eggs (rarely with a few brown spots) are laid the latter half of April.

OLIVE-SIDED FLYCATCHER

Nuttalornis borealis. Case 8, *Fig.* 59

With the general appearance of a large Phœbe, but with the breast and sides the color of the back, and a tuft of white feathers on each flank. L. 7½.

Range. North America; nests from northern New England northward (southward in the Alleghanies to North Carolina); winters in the tropics.

Washington, casual T. V. Ossining, tolerably common T. V., May 20; Aug. 15–Sept. 16. Cambridge, rare T. V., May 20–June 6; formerly not uncommon S. R., one Sept. record. Glen Ellyn, not common T. V., May 13–June 11; Aug. 11–Sept. 15. SE. Minn., common T. V., May 10–Sept. 9.

To most of us the Olive-sided is known as a rare migrant passing northward in May, among the later transients, and southward in September. When traveling the bird retains the fondness of its kind for perching on tall tree-tops, but its loud, unmistakable, whistled "come right *here*, come right *here*" is usually heard only on the nesting ground.

The nest is placed in coniferous trees about 25 feet up, and 3–5 white, brown-spotted eggs are laid in June.

WOOD PEWEE

Myiochanes virens. Case 8, *Fig.* 63

Resembles the Phœbe but is smaller with relatively longer wings and more evident wing-bars. L. 6½.

Range. Eastern North America; nesting from Florida to Canada; winters in the tropics.

Washington, common S. R., Apl. 29–Oct. 12. Ossining, common S. R., May 10–Oct. 2. Cambridge, common T. V., not uncommon S. R., May 18–Sept. 15. N. Ohio, abundant S. R., May 2–Sept. 27. Glen Ellyn, fairly common S. R., May 9–Sept. 29. SE. Minn., common S. R., May 10–Sept. 23.

In color Phœbe and Pewee are much alike and both are Flycatchers, but the resemblance ends there. Pewee loves the solitude of the forest rather than the sociability of the barnyard, and his pensive *pee-a-wee* does not even suggest the business-like *pewit-phœbe* of his better-known cousin. Nor does his dainty lichen-covered nest saddled so skillfully on the limb of a forest tree, recall the Phœbe's bulky moss and mud dwelling. Finally, the Pewee's eggs, laid in May, are wreathed with brown.

YELLOW-BELLIED FLYCATCHER

Empidonax flaviventris. Case 8, *Fig.* 61

The entire underparts, including the throat, are unquestionably sulphur-yellow. L. 5½.

Range. Eastern North America; nests from northern New York and northern New England northward into Canada; winters in the tropics.

Washington, rather common T. V., May; July 28–Oct. 6. Ossining, common T. V., May 17–June 4; Aug. 8–Sept. 20. Cambridge, T. V., sometimes rather common, May 25–June 3; Aug. 28–Sept. 8. N. Ohio, rare T. V., May 10. Glen Ellyn, rather rare T. V., May 20–June 5; Sept. 3. SE. Minn., common T. V., May 19.

Known chiefly as a not common migrant who visits our woods on his journey to and from his northern home. He is a silent traveler and gives no clue to his identity by calling or singing, but his underparts are so much yellower than those of any other of our small Flycatchers that they make a definite field character. Nests in coniferous forests on the ground, laying 4 white, lightly spotted eggs in June.

ACADIAN FLYCATCHER

Empidonax virescens. *Case* 8, *Fig.* 60

Throat white, upperparts bright, light olive-green, without tinge of brown as in the Alder Flycatcher.

Range. Eastern North America; rather southern, nesting from Florida north to Connecticut and Michigan; winters in the tropics.

Washington, common S. R., May 1–Sept. 15. Ossining, common S. R., May 10–Aug. 27. N. Ohio, common S. R., May 4–Sept. 15. Glen Ellyn, not common S. R., May 6–Aug. 27, and probably later.

On the low-sweeping limb of a beech over a stream is an ideal site for the frail nest of the Acadian. The bird is never found far from it and its low-ranging habits permit us to see its characteristic markings and hear its peculiar sudden, explosive little *pee-e-yúk* and more commonly uttered *spee* or *peet.*

The creamy white, brown-spotted eggs are laid the latter part of May.

ALDER FLYCATCHER

Empidonax trailli alnorum. *Case* 8, *Fig.* 62

Larger than the Least Flycatcher, but resembling it in having the back olive-brown instead of olive-green as in the Acadian and Yellow-bellied Flycatchers. L. 6.

Range. Eastern North America; nests from northern New Jersey (locally) and mountains of West Virginia to Canada; winters in the tropics.

Washington, irregularly common T. V., May 8–May 28; Aug. 16–Sept. 17. Ossining, rare T. V., May 19–May 31; Aug. 29. Cambridge, rare T. V., May 28–June 6; Aug.; occasional in summer.

Traill's Flycatcher (*E. t. traillii*), a slightly browner bird is the Mississippi Valley form. N. Ohio, common S. R., May 7–Sept. 10. Glen Ellyn, quite common S. R., May 14–Sept. 19. S. E. Minn., common S. R., May 6–Aug. 10.

A rare recluse of the alders who, traveling silently between his summer and his winter homes, makes few friends among men. Dwight describes its call note as "a single *pep*," and its song as *ee-zee-e-up*, resembling that of the Acadian. The bird places the nest low down in the crotch of one of the bushes among which it lives and lays 3–4 white, brown-spotted eggs in June.

LEAST FLYCATCHER

Empidonax minimus. Case 6, *Fig.* 44.

Smallest of the Flycatchers; like the Adler Flycatcher its back is olive-brown rather than olive-green; no evident yellow on the underparts. L. 5½.

Range. Eastern North America; nests from Iowa, Pennsylvania and New Jersey to Canada; winters in the tropics.

Washington, common T. V., Apl. 20–May 20; Aug. 13–Sept. 15. Ossining, tolerably common S. R., Apl. 25–Aug. 26. Cambridge, very common S. R., May 1–Aug. 25. N. Ohio, common T. V. Apl. 15–May 25; Aug. 25–Oct. 1; rare in summer. Glen Ellyn, not common S. R., chiefly T. V., May 4–Sept. 24. SE. Minn., common S. R., Apl. 30–Sept. 13.

A Flycatcher of lawns and orchard, seldom going far from the tree in which its nest with its white eggs is placed. A dry-voiced little bird whose unmusical, but distinctly uttered *chebéc, chebéc* makes up in character what it lacks in sweetness. Between whiles he swings out for a passing insect only to call *chebéc, chebéc, chebéc* when he returns to his perch.

LARKS. FAMILY ALAUDIDÆ

PRAIRIE HORNED LARK

Otocoris alpestris praticola. Case 2, Fig. 42

Note the long hind-toe nail (or the track it leaves), the little feathered 'horns,' the black patch on cheeks and breast (less evident in winter). Smaller than the Northern Horned Lark, which visits the United States only in winter, with the line over the eye white, and throat but faintly tinged with yellow. L. 7¼.

Range. Nests in the Upper Mississippi Valley from Missouri and in the Atlantic States (locally), from Connecticut northward; winters southward to Texas and Georgia. The Horned Lark (*Otocoris alpestris alpestris*), is a more northern race, nesting in the Arctic regions and migrating southward as far as Ohio and rarely Georgia, when it is often associated with the resident Prairie Horned Lark. It is larger than that race (L. 7¼) and has the throat and line over the eye yellow.

Washington, common W. V., Aug. 11–Apl. Cambridge, one record. N. Ohio, common P. R. Glen Ellyn, common P. R. SE. Minn., S. R., Mch.–Nov., a few in mild winters.

A bird of open places—shores, plains, and prairies, and roadways—who runs (not hops) nimbly ahead of one, or, with a short note, rises, and on its long, pointed wings, flies on ahead. He usually returns to the ground, but may alight on a fence; his long hind toe-nail not being suited to grasping a small perch. The weak, twittering song is uttered on the wing, when the bird, like its relative the Skylark, mounts into the air. It also sings from a perch near the ground.

The Prairie Horned Lark is the first of our small birds to nest, making its home on the ground and laying four finely speckled eggs early in March. After the nesting season the birds gather in flocks.

CROWS, JAYS, ETC. FAMILY CORVIDÆ

BLUE JAY

Cyanocitta cristata cristata. Case 2, Fig. 20

Color, habits and voice combine to render the Blue Jay conspicuous. L. 11¼.

Range. Eastern North America from Georgia to Quebec; migratory only at the northern limit of its range. The Florida Blue Jay (*Cyanocitta cristata florincola,* Case 4, Fig. 75) is smaller (L. 10¼) and grayer above. It is found throughout Florida.

Washington, rather rare P. R., common T. V., Apl. 28–May 15; Sept. 15–Oct. 15. Ossining, tolerably common P. R. Cambridge, common P. R., abundant T. V., Apl. and May; Sept. and Oct. N. Ohio, common P. R. Glen Ellyn, common P. R. SE. Minn., common P. R.

If the Blue Jay were as good as he is beautiful he would be our most popular bird. But fine feathers do not always make fine birds, and to those who judge birds by human standards the Blue Jay's loud, harsh voice, overbearing manners, and nest-robbing habits are unpardonable. With all his faults, however, the true bird enthusiast loves him still. His bright colors, dashing ways and intelligence win our admiration and we feel honored when he makes his home near ours, building in early May a well-made nest in a tree-crotch, for the reception of the 4–6 olive-green, thickly speckled eggs.

FLORIDA JAY

Aphelocoma cyanea

Size of the Blue Jay but quite unlike it in color. The head, wings and tail are grayish blue without white markings; the back is pale brown, the underparts dirty white, with the throat inconspicuously streaked and a faint bluish breast-band.

Range. Florida between lat. 27° and 30°, and chiefly along the coasts.

This is the 'Scrub-Jay' of Florida and is not to be confused with the Florida Blue Jay. It lives in dis-

tricts where scrub palmetto grows, but also comes into gardens and grows where it soon responds to proper treatment and becomes semi-domesticated. It nests early in April.

CANADA JAY

Perisoreus canadensis canadensis

Size of the Blue Jay; a gray bird with a black crown and white forehead, cheeks and throat.
Range. Northern New England and northern New York, northward; resident, rarely straggling southward.
Cambridge, A. V., one record, Oct.

It is singular that the Canada Jay at the north and the Florida Jay in the south should show exceptional confidence in man, while the Blue Jay always seems to regard him with suspicion. The very day we make camp in the north woods the Canada Jay or Whiskey Jack becomes our guest. As though assured of a welcome he fearlessly joins our party, helping himself to such supplies as please his fancy. Long before our arrival, when snow still covered the ground, he has reared his family and for the rest of the year has only his own wants to fill.

RAVEN

Corvus corax principalis

Much larger than the Crow, the throat with long, pointed feathers, instead of short, rounded ones. L. 24.
Range. North America rare and local in the Eastern States, south to New Jersey on the coast and to Georgia in the mountains.

Crows *caw*, while Ravens *croak;* but to be sure that you have actually seen a Raven he should be with Crows, when the Raven's much larger size is evident. Unless, however, you should visit the few localities in the eastern States where Ravens live you are not likely to make the bird's acquaintance. Ravens nest on cliffs as well as in trees.

Their eggs, which resemble those of the Crow in color, are laid in April.

CROW

Corvus brachyrhynchos brachyrhynchos. *Case* 1, *Fig.* 19; *Case* 3, *Fig.* 27

Sexes alike in color. L. 19½.

Range. North America; migratory at the northern limit of its range; roosting in colonies in winter.

Washington, abundant P. R. Ossining, common P. R. Cambridge, common P. R, abundant T. V. N. Ohio, common P. R. Glen Ellyn, common P. R. SE. Minn., common S. R., Mch.–Nov., uncommon W. V.

The Crow and the Robin are probably the best known of all our birds. The former we treat as an enemy and the latter as a friend, and one therefore is as wild as the other is tame. Whether the Crow deserves to be outlawed has not as yet been decided. But we should not condemn him out of court and let us remember that as an intelligent, self-respecting citizen, who animates wintry wastes with his shining sable form and clarion call, he has other than economic claims to our consideration. The nest is placed in a tree about 30 feet up, and 4–6 eggs, green thickly marked with brownish are laid in April.

The Florida Crow (*C. b. pascuus*) is very near the northern bird, but has the wings and tail smaller, the bill and feet larger. It lives chiefly in the pine barrens of Florida and is much less common in the state than the Fish Crow.

FISH CROW

Corvus ossifragus

Brighter, more uniformly colored above and below, the feathers without dull tips.

Range. Atlantic and Gulf coast region from the lower Hudson Valley and Long Island Sound southward. Migratory only at

the northern limit of its range. Found throughout Florida, but elsewhere usually not far from tidal water.

Washington, rather common P. R. Cambridge, A. V., one record, Mch.

In life the Fish Crow may be distinguished from the common Crow by its smaller size and hoarser voice. The difference in size, however, is evident only when the two are together, but once the cracked, reedy *car* (not *caw*) of the Fish Crow has been learned the species may always be identified when heard. It is somewhat like the note of a young Crow, but less immature. The nest and eggs are much like those of the common Crow. The eggs are laid in May.

STARLINGS. FAMILY STURNIDÆ

STARLING

Sturnus vulgaris. Case 2, Figs. 24, 25

In winter conspicuously dotted with whitish; in summer with but few dots and a yellow bill; at all times with a short tail and long wings. L 8½.

Range. Introduced from Europe into Central Park, New York City, in 1890, now more or less numerous from Virginia to Maine; occasional west of the Alleghanies. It is a quick, active bird, probing the ground now this side, now that, as it walks rapidly over our lawns. The short tail and long wings are most noticeable in the air and distinguish the Starling from our other black birds.

A long-drawn whistle, such as one calls to a dog, is the Starling's most common note, but it has many others. It nests in April, often after quarreling with Flickers for possession of a nest-hole in which to lay its pale bluish eggs. The young appear in mid-May and their harsh, rasping food-call is a common note for several weeks; then the birds begin to gather in companies which, later, form flocks of thousands.

BLACKBIRDS, ORIOLES, ETC. FAMILY ICTERIDÆ

BOBOLINK

Dolichonyx oryzivorus. *Case* 7, *Figs.* 13, 14

In July, after nesting, the male molts into a plumage resembling that of the female, when both are known as Reedbird. L 7¼.

Range. Nests from northern New Jersey and northern Missouri to southern Canada and westward to British Columbia; leaves the United States through Florida and winters chiefly in northwestern Argentina; returns to United States early in April.

Washington, T. V., common in spring, abundant in fall; Apl. 26–May 30; July 23–Nov. 14. Ossining, tolerably common S. R., May 1–Oct. 5. Cambridge, very common S. R., May 8–Sept. 10. N. Ohio, common S. R., Apl. 16–Oct. 10. Glen Ellyn, S. R., Apl. 27–Oct. 9. SE. Minn., common S. R., Mch. 5–Aug. 27.

A bird with a dual personality; welcome minstrel of the meadows when nesting, dread scourge of the rice-fields when traveling. With the loss of his trim suit of black, white, and buff, Bob loses also his merry tinkling, rippling song, and acquires with his streaked Reedbird suit a single watchword. *Tink, tink* he calls from somewhere overhead, and *tink, tink* his comrades answer as they follow a trackless path through the sky on their 5000-mile journey.

The nest is placed on the ground and 4–7 grayish, blotched eggs are laid late in May or early in June.

COWBIRD

Molothrus ater ater. *Case* 5, *Figs.* 8, 9

The male's brown head distinguishes him from other Blackbirds; the female wears a dull gray garb well designed to make her inconspicuous. L. 8.

Range. North America; nesting from North Carolina and Louisiana to Canada; winters from Virginia and Ohio southward.

Washington, rather rare P. R., common T. V. Ossining, com-

mon S. R., Mch. 22–Nov. 11. Cambridge, common S. R., Mch. 25–Nov. 1; occasional in winter. N. Ohio, abundant S. R., Mch. 10–Nov. 15. Glen Ellyn, common S. R., Mch. 15–Sept. 10. SE. Minn., common S. R., Apl. 11–Aug. 19.

Outlaws among birds, they pair not neither do they build. Without moral standards or maternal instincts the female accepts the attention of any male that chances to win her fancy and deposits her eggs in the nests of other birds. She is a slacker and a shirker, who keeps much in the background during the breeding season. Color, habit, his sliding, glassy whistle, and guttural gurgling, make the male conspicuous. Leaving the care of their foster parents the young join others of their kind and flock in the grainfields or about cattle in the pastures.

YELLOW-HEADED BLACKBIRD

Xanthocephalus xanthocephalus. Case 6, Fig. 45

Large size and a yellow head distinguish the male; the female is duller, the body brownish, the head yellowish. L. 10.

Range. Mississippi Valley and westward, breeding from northern Illinois northward to Canada; winters from the west Gulf coast and southern California into Mexico; accidental east of the Alleghanies.

Washington, A. V., one instance, Aug. Cambridge, A. V., one record, Oct. Glen Ellyn, A. V., May 21, 1898. SE. Minn., common S. R., Apl. 21.

Hanging their cradle nest in the quill-reeds or rushes, the Yellow-heads are not found far from it until the young take wing. The male entertains his mate with a variety of strange calls and whistles, but leaves to her the hatching of the brown speckled eggs and care of the young while they are in the nest. Like other Blackbirds they migrate and winter in flocks.

RED-WINGED BLACKBIRD

Agelaius phœniceus phœniceus. Case 5, Figs. 5, 6

The male in spring and early summer is unmistakable; in winter his feathers are tipped with brownish, more pronounced

in the young. The streaked females require closer scrutiny. L. 9½.

Range. Eastern North America, nests from Florida to Canada; winters from Maryland southward, sometimes farther north. The Florida Red-wing (*A. p. floridanus*, Case 4, Figs. 28, 29) is smaller and with a slenderer bill. It inhabits Florida (except the southeast coast and Keys) and ranges west along the Gulf coast to Texas. The Bahama Red-wing (*A. p. bahamensis*) is still smaller. It is resident in southeastern Florida, the Keys and Bahamas.

Washington, common P. R., abundant in migration. Ossining, common S. R., Feb. 25–Nov. 11. Cambridge, abundant S. R., Mch. 10–Aug. 30; a few winter. N. Ohio, abundant S. R., Mch. 1–Nov. 15. Glen Ellyn, common S. R., Mch. 5–Nov. 19. SE. Minn., common S. R., Mch. 8–Nov. 14.

The Red-wing's mellow *kong-quer-reee* is as certain an indication of the presence of water as is the piping of frogs in the spring. It may be only a bit of boggy marshland, it may be a reedy lakeside, but water there will surely be. On a frequented perch he half spreads his wings, fluffs out his scarlet epaulets, bursting into bloom, as it were, when he utters his notes—a singing flower! The nest is in the alders, button-bushes, or reeds, or even on the ground, and although the birds come in March, their pale blue, spotted, blotched, and scrawled eggs are not laid until May. Except when nesting, Red-wings live in flocks.

MEADOWLARK

Sturnella magna magna. Case 2, Fig. 23

A large, quail-like bird which shows white outer tail-feathers when it flies; if one can obtain a front view, the yellow underparts and black breast-crescent are conspicuous. L. 10¾.

Range. Eastern North America, rare west of the Mississippi; nesting from North Carolina and Missouri to Canada; winters from southern New England and northern Ohio southward. The Southern Meadowlark (*S. m. argutula*, Case, 4, Fig. 79) is smaller and darker. It is resident in the south Atlantic and Gulf States.

Washington, common P. R., less common in winter. Ossining, tolerably common S. R., Feb. 20–Nov. 27; a few winter. Cambridge, common S. R., not common W. V. N. Ohio, abundant

S. R., Mch. 5–Nov. 15; a few winter. Glen Ellyn, common S. R., Jan. 24–Nov. 15; irregular W. V. SE. Minn., common S. R., Mch. 25–Oct. 15, rare W. V.

The Meadowlark is a fifer of the fields, whose high, clear whistle is one of the most welcome bird songs of early spring. In May, when nesting, it often sings an ecstatic twittering warble on the wing. The alarm calls are an unmusical *dzit* or *yert* and a string of beady, metallic notes.

The nest is placed on the ground. The 4–6 eggs are white, speckled with brown.

WESTERN MEADOWLARK

Sturnella neglecta

Grayer than the Eastern Meadowlark, with disconnected tail-bars and yellow spreading to the sides of the throat.

Range. Western United States, rare east of the Mississippi. SE. Minn., common S. R., Mch. 25–Oct. 15.

With the general appearance and habits of the Eastern Meadowlark, but differing in its call-notes and song. Instead of the sharp *dzit* or *yert* and metallic twitter of the eastern bird, the western species calls *chuck, chuck*, followed by a rolling *b-r-r-r-*. The eastern bird plays the fife but the western uses the flute, and its bubbling grace-notes are easily distinguishable from the *straight* whistling of its eastern cousin.

ORCHARD ORIOLE

Icterus spurius. Case 7, Figs. 10–12

Adult males are unmistakable, but females and young males in their first fall wear a non-committal costume and must be looked at sharply. In their first nesting season, young males resemble the female but have a black throat. This is a smaller, more slender bird than the Baltimore Oriole, and the female is less orange. L. 7¼.

Range. Eastern United States, nesting from the Gulf States to Massachusetts and Minnesota; winters in the tropics.

Washington, common S. R., Apl. 29–Aug. 22. Ossining, common S. R., May 2–Aug. 6. Cambridge, S. R., sometimes rather

common, May 15–July. N. Ohio, common S. R., Apl. 28–Sept. 5. Glen Ellyn, not common S. R., Apl. 28. SE. Minn., uncommon S. R., May 10–Aug. 26.

In the northern part of its range, the Orchard Oriole is somewhat less common, and more local than the Baltimore Oriole, while its duller colors and more retiring habits make is more difficult to see. The voice is richer, more cultured —if one may use the term—than that of its brilliant orange-plumed cousin; indeed, in my opinion, this species deserves a place in the first rank of our songsters. The nest of finely woven grasses is not so deep as that of the Baltimore. Three to five bluish white eggs, spotted and scrawled with black, are laid the latter part of May.

BALTIMORE ORIOLE

Icterus galbula. *Case* 7, *Figs.* 8, 9

The orange and black male needs no introduction; the female is tinted with orange strongly enough to show her relationship. L. 7½.

Range. Eastern North America; nests from northern Georgia to Canada; winters in the tropics.

Washington, rather common S. R., Apl. 29–Aug. 26. Ossining, common S. R., May 2–Sept. 1. Cambridge, very common S. R., May 8 through Aug. N. Ohio, common S. R., Apl. 15–Sept. 10. Glen Ellyn, common S. R., Apl. 26–Sept. 4. SE. Minn., common S. R., May 1–Sept. 1.

This is the orange-and-black whistler of our fruit and shade trees, whose wife skillfully weaves a pendant cradle at the end of some drooping branch, therein to lay her white eggs curiously marked with fine lines and blotches of black. The young, after leaving the nest in June, have a loud, babyish food-call, *dee-dee-dee-dee*, repeated time after time until their wants are satisfied.

RUSTY BLACKBIRD

Euphagus carolinus. *Case* 5, *Figs.* 3, 4

The bird's common name is based on the fall plumage of the male, which is broadly margined with rusty. By spring these

tips wear off and the bird is glossy black. Size of the Red-wing but with a whitish eye and no red; the female unstreaked.

Range. Eastern North America; nests from the northern part of the northern states to Canada; winters from New Jersey and Ohio to the Gulf States.

Washington, common W. V., Oct. 13–Apl. 30. Ossining, common T. V., Mch. 26–May 8; Sept. 28–Nov. 27. Cambridge, very common T. V., Mch. 10–May 8; Sept. 15–Oct. 31. N. Ohio, common T. V., Mch. 5–May 10; Sept. 10–Nov. 15. Glen Ellyn, common T. V., Mch. 3–May 8; Sept. 12–Nov. 15; uncommon W. V. SE. Minn., common T. V., Mch. 26–Nov. 24.

This is the least conspicuous of our Blackbirds. It nests chiefly north of the United States, migrates in small flocks, and is less noisy than the Red-wing or Grackle and not so much in evidence as the Cowbird. Dwight describes its notes as "a confused medley of whistles, sweeter and higher-pitched than those of the Red-wing." It nests in May, building in coniferous trees or near the ground, and laying 4–7 greenish eggs, heavily marked with brown and purple.

PURPLE GRACKLE

Quiscalus quiscula quiscula. Case 5, Fig. 1

Plumage varied with metallic and iridescent reflections; tail long, fan-shaped, often 'keeled' in flight; eye pale yellow. Male, L. 12½. The female is smaller and duller; L. 10½.

Range. Eastern North America; nests east of the Alleghanies from northern Georgia to Connecticut; winters from Maryland southward.

Washington, common T. V. and S. R., Feb. 20; a few winter. Ossining, tolerably common S. R., Feb. 15–Nov. 8. Cambridge, rare S. R.

The Florida Grackle (*Quiscalus quiscula aglæus*, Case 4, Fig. 74) is smaller than the Purple Grackle and has the head and neck violet-purple, the back bottle-green. It is resident in Florida and the Gulf States north to South Carolina.

The Bronzed Grackle (*Quiscalus quiscula æneus*, Case 5, Fig. 2) is the same size as the Purple Grackle, but has

the body bronzy without iridescent markings. It nests from Texas up the Mississippi Valley and eastward through central New York and Massachusetts to New Brunswick, north to Canada; and in migration is found in the range of the Purple Grackle. It winters from the Ohio Valley southward.

Washington, rare T. V., Feb 20–Apl. 17. Ossining, common T. V., Apl; Nov. Cambridge, abundant. S. R., Mch. 10–Nov–1; occasional in winter. N. Ohio, abundant, S. R., Mch. 1–Nov. 15; rarely winters. Glen Ellyn, common S. R., Mch. 5–Nov. 15, SE. Minn. common S. R., Mch, 18–Nov. 1; rare in winter.

The Grackle is the largest of our northern Blackbirds. In the south it is exceeded in size only by the Boat-tailed Grackle. It migrates in flocks and nests in colonies, often in parks and cemeteries. It feeds chiefly on the ground and is frequently seen upon our lawns when it may be known by its rather waddling, walking gait, and its long tail. Its notes are harsh, cracked and discordant, but when heard in chorus make a pleasing medley. The nest is sometimes placed in pines about 30 feet up, but also in bushes and even in holes in trees. The 3–7 eggs are usually pale bluish, heavily blotched and scrawled with brown and black.

BOAT-TAILED GRACKLE

Megaquiscalus major major

The male is a long-tailed, glossy blue-black bird. (L. 16.) The female is much smaller (L. 12), blackish brown above, buffy below.

Range. Florida north on the Atlantic coast to Virginia; west to Texas.

This giant Grackle frequents lakes, lagoons and bays, where it feeds along the shore or among aquatic plants. The male, a poseur among birds, strikes strange attitudes with bill pointing skyward, and with apparent effort forces out hoarse whistles. The female is quiet and

unassuming. They nest in colonies, building in bushes and laying in April 3–5 bluish white eggs, strikingly blotched and scrawled with blackish.

FINCHES, SPARROWS, ETC. FAMILY FRINGILLIDÆ

EVENING GROSBEAK

Hesperiphona vespertina vespertina

A large, thick-set, heavy-billed, black and yellow Finch. The male with the forehead and most of the body yellow, the crown, wings and tail black; the inner wing-quills white. The female

EVENING GROSBEAK.
Male and Female.

is brownish gray, more or less tinged with yellow, the wings and tail black with white markings. L. 8.

Range. Western North America, wintering regularly eastward to Minnesota and irregularly to the North Atlantic States.

Glen Ellyn, one record, Dec. 11, 1889. SE. Minn., common W. V., Oct. 17–May 19.

The Evening Grosbeak is a notable traveler from the far northwest whose rare, irregular, and unheralded visits

and striking appearance make him always a welcome and distinguished guest. Of recent years these birds have come to the east with greater frequency, arriving in November and remaining as late as May. They feed largely on the buds and seeds of trees—maple and box-elder—and can often be attracted to our feeding-stations by the offer of sunflower seeds. They are usually associated in flocks of from six to eight to ten birds, and their notes when perching, have been described as resembling the jingle of small sleigh-bells, while their song is said to be a " wandering jerky warble."

PINE GROSBEAK

Pinicola enucleator leucura. Case 2, Figs. 53, 54

Adult males are unmistakable; but young males and females might be confused with the female Evening Grosbeak, but they lack the conspicuous white markings in the wings and tail of that species. L. 9.

Range. Northern North America, wintering southward irreguarly to Indiana and New Jersey; rarely as far as Kentucky and Washington.

Washington, casual in winter. Ossining, irregular W. V., Dec. 18–Apl. 12. Cambridge, irregular W. V., frequently common, sometimes abundant, Nov. 1–Mch. 25. N. Ohio, occasional W. V. Glen Ellyn, uncommon and irregular W. V., Oct. 25–? SE. Minn., uncommon W. V.

In the summer the Pine Grosbeak lives in coniferous forests, but on its irregular wanderings southward, like the Evening Grosbeak, it feeds upon the seeds of deciduous trees and bushes. The Grosbeak's call-note is a clear whistle of three or four notes which may be easily imitated; its song is said to be prolonged and melodious.

The Pine and Evening Grosbeaks would be notable figures in any gathering of birds, but coming at the most barren time of the year when our bird population is at the minimum and the trees are leafless, they are as welcome as they are conspicuous.

PURPLE FINCH

Carpodacus purpureus purpureus. *Case 2, Figs.* 32, 33; *Case 4, Figs.* 48, 49

The adult male is dull rose rather than purple, the female is sparrow-like in appearance but may be known by a whitish line over the eye and the company she keeps. Young males resemble their mother their first winter. L. 6¼.

Range. Eastern North America; nesting from northern Illinois and northern New Jersey northward to Canada; winters from the Middle States to the Gulf.

Washington, common W. V., Sept. 12–May 26, largely a migrant. Ossining, rare P. R., common T. V. Cambridge, P. R. common from Apl. to Oct.; irregular, but sometimes abundant in winter. N. Ohio, common W. V., Sept. 1–May 20. Glen Ellyn, fairly common T. V., Mch.–Apl., Sept.–Oct., uncommon W. V.

Erratic wanderers which travel on no fixed schedule but seem to feel at home wherever they find themselves. Except when nesting, they usually live in small flocks which, if the fare of our feeding-stands please them, will sometimes live with us for weeks. The call-note is *creak-creak*, the song a flowing, musical warble often uttered in detached fragments. Four to six bluish, spotted eggs are laid in May; the nest being generally built in a coniferous tree.

ENGLISH SPARROW; HOUSE SPARROW

Passer domesticus domesticus. *Case 2, Figs.* 30, 31; *Case 4, Figs.* 38, 39

Unfortunately too well known to require description. L. 6¼.

Range. First introduced into this country at Brooklyn, N. Y., from Europe in 1851; now found everywhere at all times.

Hardy, pugnacious and adaptable, the Sparrow is a notable success in the bird world. We could overlook his objectionable traits if he possessed a pleasant voice, but his harsh, discordant notes and incessant chatter are unfortunately in harmony with his character. After all he gives a welcome touch of life to city streets and yards.

Sparrows' nests are made of almost anything the birds can carry and built in any place that will hold them. The 4–7 finely speckled eggs are laid as early as March, and several broods are raised.

AMERICAN CROSSBILL

Loxia curvirostra minor. Case 2, Figs. 49, 50

Crossbills have the mandibles crossed; the absence of wing-bars distinguishes this species from the usually less common White-winged Crossbill. L. 6¼.

Range. Nests from northern New England to Canada and southward in the Alleghanies to northern Georgia. Winters irregularly southward, rarely as far as Florida and Louisiana.

Washington, irregular W. V., sometimes abundant. Ossining, irregular; noted in almost every month. Cambridge, of common but irregular occurrence at all seasons. N. Ohio, irregular, often common, sometimes breeds. Glen Ellyn, uncommon and irregular, Oct. 20–June 11. SE. Minn., W. V., Oct. 25.

Crossbills and Grosbeaks are among winter's chief attractions. While the latter, as I have said above, will leave their summer homes in coniferous forests to feed in winter on the seeds of deciduous trees, the Crossbills are less adaptable. They are specialists in cone-dissecting. Their singularly shaped bills prevent them from eating many kinds of food available to other birds, but no other birds can compete with them in extracting the seeds from cones. Having had too limited an experience with man to have learned to fear him, they are so surprisingly tame that I have known birds to be plucked from trees as one would pick off the cones on which they were feeding. In March, while the ground is still snow-covered, they lay 3–4 pale greenish, spotted eggs in a well-formed nest, 15–30 feet up in a coniferous tree.

WHITE-WINGED CROSSBILL

Loxia leucoptera. Case 2, Figs. 51, 52

Both sexes have white wing-bars and the male is of a paler, more rosy red than the male of the American Crossbill. L. 6.

Range. Nests from northern New England to Canada; winters irregularly to southern Illinois and North Carolina.
Washington, casual. Ossining, rare T. V., Oct. 29–Dec. 6. Cambridge, irregular W. V. N. Ohio, rare W. V. Glen Ellyn, rare, fall records only, Nov. SE. Minn., W. V., latest record Mch. 4.

A rarer bird than the American Crossbill which, however, it resembles in habits. Both climb about the branches of cone-bearing trees like little Parrots, while feeding keep up a low conversational chatter, and take wing with a clicking note. They have been found nesting in Nova Scotia as early as February 6.

REDPOLL

Acanthis linaria linaria. Case 2. Figs. 47, 48

Any little sparrow-like bird with a red cap is a Redpoll. Adult males have the breast also red. L. 5¼.
Range. Nests in Canada and Alaska; winters irregularly southward to Ohio and Virginia.
Washington, very rare and irregular W. V. Ossining, regular W. V., Nov. 25–Mch. 26. Cambridge, irregular W. V., often very abundant, Oct. 25–Apl. 10. N. Ohio, rare W. V. Glen Ellyn, irregular W. V., Nov. 6–Mch. 7. SE. Minn., common W. V., Oct. 31–Apl. 7.

A winter visitor from the far North whose coming never can be foretold. Years may pass without seeing them, then late some fall, they may appear in numbers. They are usually in flocks and feed upon seeds as well as birch and alder catkins. In notes and general habits the Redpoll resembles the Goldfinch.

Holbœll's Redpoll (*A. holbœlli*) is a slightly larger race, with a longer, more slender bill. It is a more northern form than the preceding, and rarely visits the United States. The Greater Redpoll (*A. l. rostrata*) is also larger than the common Redpoll, but has a shorter, stouter bill. It nests in Greenland and is of casual occurrence in the northern United States. The Hoary Redpoll (*A. hornemanni exilipes*) is a whiter bird than the preceding

with no streaks on the rump and comparatively few on the underparts. It nests within the Arctic Circle and rarely visits the northern United States in winter.

Satisfactory identification of these races of the Redpoll can be made only by expert examination of specimens. The field student, however, may call any Redpoll he sees the Common Redpoll with the chances of being right largely in his favor.

GOLDFINCH

Astragalinus tristis tristis. *Case 2, Figs.* 35, 36; *Case 4, Figs.* 50, 51

While he wears his 'Goldfinch' costume, the male will be known at a glance, but in winter, when he takes the dull yellow-olive dress of his mate, several glances may be required to recognize him, and this remark, of course, applies to the female at all seasons. L. 5.

Range. North America; the eastern form nests from Arkansas and northern Georgia to Canada and winters from the Northern to the Gulf States.

Washington, common P. R. Ossining, common P. R. Cambridge, very common P. R. N. Ohio, common P. R. Glen Ellyn, common P. R. SE. Minn., P. R., common in summer, uncommon in winter.

A beautiful, musical, cheerful bird, as sweet of disposition as he is of voice. To hear a merry troop of Goldfinches singing their spring chorus is to hear the very spirit of the season set to music. Their call-note is a questioning *dearie, dearie*, their flight-call *per-chiê-o-ree, per-chiê-o-ree*, as in long undulations they swing through the air. Their song is suggestive of a Canary's. They are late housekeepers, not nesting before the latter half of June, when 3–6 pale bluish white eggs are laid in a nest warmly lined with plant down.

PINE SISKIN

Spinus pinus pinus. Case 2. Fig. 55

A streaked, sparrow-like bird, with yellow markings in wings and tail which show in flight. L. 5.

Range. North America; nests from northern New England north to Canada and in the mountains, south to North Carolina; in winter southward to the Gulf States.

Washington, irregularly abundant W. V., Oct. 24–May 20. Ossining, irregular P. R. Cambridge, irregular W. V., Oct. 15–May 10; sometimes very abundant; one breeding record. N. Ohio, tolerably common W. V., Sept. 20–May 15. Glen Ellyn, irregular T. V., Apl. 8–May 24; Sept. 8–Nov. 29. SE. Minn., uncommon T. V., and W. V. Oct. 29–Apl. 9.

The Siskin belongs in the group of winter visitants whose coming cannot be foretold. Some years it is rare or wanting, others abundant, a flock sometimes containing several hundred birds. In general habits it resembles the Goldfinch, feeding on weed seeds and catkins, particularly of the alder, and on the seeds of conifers. The call-note is a high *e-eep*; its song like that of the Goldfinch but less musical.

SNOW BUNTING

Plectrophanes nivalis nivalis. Case 2, Fig. 57

The prevailing tone of plumage is white, particularly when the bird is on the wing; the long, hind toe-nail should be noted. L. 6¾.

Range. Nests in Arctic regions, winters irregularly south to Kansas and Virginia.

Washington, W. V., casual, one instance. Ossining, irregular W. V., Oct. 25–Mch. 22. Cambridge, common W. V., Nov. 1–Mch. 15; abundant in migrations. N. Ohio, tolerably common W. V., Dec. 10–Mch. 15. SE. Minn., common W. V., Oct. 9–Mch. 14.

Snow Buntings live in flocks and love open places, such as Horned Larks frequent, and are often found with them in fields or along the shore. Like the Horned Larks they are walkers, not hoppers, and like most walkers, it is exceptional for them to perch in trees. Hoffman described their notes as "a high, sweet, though slightly mournful *tee*, or *tee-oo*, a sweet rolling whistle, and a harsh *bzz*."

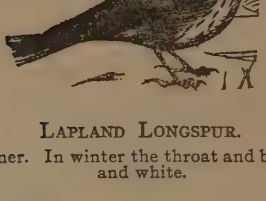
LAPLAND LONGSPUR

Calcarius lapponicus lapponicus

A sparrow-like bird, with reddish brown wings, a black or blackish breast, white, streaked underparts and a brownish back. L. 6¼.

Range. Nests in Arctic regions, wintering southward, rarely and irregularly in the Atlantic States, to New York (casually South Carolina) and more commonly in the Mississippi Valley to Ohio and Texas.

Washington, W V. one instance, Dec. Ossining, W. V., casual, Cambridge, one record. N. Ohio, tolerably common W. V., Nov.



LAPLAND LONGSPUR.

Adult male in summer. In winter the throat and breast are mixed black and white.

15–Apl. 25. Glen Ellyn, common W. V., Oct. 16–May 16. SE. Minn., common W. V.

A rare visitor from the far North who, if we see it at all, will probably be found in the company of Horned Larks or Snow Buntings. It is a browner bird than either of them, so while this is not a case of 'birds of a feather' it *is* a case of birds of a long hind toe-nail, since all three are distinguished by having a toe-nail actually longer than its toe. All three are walkers, which means also that they are ground-birds rather than tree-birds, and the tracks they leave in the snow, or on the beach, distinguish them from other birds if not from each other.

VESPER SPARROW

Poœcetes gramineus gramineus. *Case 4, Fig. 36; Case 5, Fig. 16*

Paler than any of our other field inhabiting Sparrows, except the Savannah, which is smaller; and differing from them all by having a reddish brown shoulder-patch and white outer tail-feathers. L. 6.

Range. Nests from North Carolina and Kentucky to Canada; winters from its southern nesting limits to the Gulf States.

Washington, P. R., very common T. V., less so in summer and winter. Ossining, tolerably common S. R., Apl. 2–Nov. 4. Cambridge, common S. R., Apl. 5–Oct. 25. N. Ohio, abundant S. R., Mch. 20–Nov. 7. Glen Ellyn, fairly common S. R., Mch. 21–Oct. 25. SE. Minn., common S. R., Apl. 1–Oct. 29.

A Sparrow of broad fields and plains whose song voices the spirit of open places. Neither words nor musical notation can describe it recognizably. It has somewhat the form of the Song Sparrow's song, just as the two birds resemble each other in form but are unlike in detail. One must, therefore, first learn to know the bird—an easy matter, since it is common and can be readily identified by its white outer tail-feathers—and thereafter you will be the richer for a knowledge of this rarely appealing bit of bird music.

The nest, as one might suppose, is built on the ground, and the 4–5 whitish spotted eggs are laid early in May.

IPSWICH SPARROW

Passerculus princeps

With a general resemblance to the Savannah Sparrow (Case 5, Fig. 23) but larger, L. 6¼, and decidedly paler.

Range. Nests on Sable Island off Nova Scotia; winters south along the coast, regularly to New Jersey; rarely to Georgia.

Cambridge, casual, two instances, Oct.

Few migratory birds have a more restricted breeding range than the Ipswich Sparrow. Confined to a sand-bar island during the summer where it is never out of sight or sound of the sea, it seeks similar haunts during

the winter when it is rarely found far from the immediate vicinity of the ocean. In general habits and nesting, it resembles the Savannah Sparrow, of which, indeed, it is doubtless an island representative.

SAVANNAH SPARROW

Passerculus sandwichensis savanna. Case 4, Fig. 47; Case 5, Fig. 23

In general color slightly paler than the Vesper Sparrow; smaller than that species; no white tail-feathers; a touch of yellow before the eye and on the bend of the wing. L. 5¾.

Range. Nests from Long Island and northern Iowa to Canada; winters from southern New Jersey and southern Indiana southward to Mexico.

Washington, abundant T. V., Mch. 20–May 11; Sept. 21–Oct. 23; a few winter. Ossining, common T. V., Apl. 3–May 13; Aug. 28–Oct. 28. Cambridge, abundant T. V., Apl., Oct.; breeds sparingly. N. Ohio, not common T. V., Mch. 20–May 12. Glen Ellyn, fairly plentiful S. R., Apl. 8–Oct. 20. SE. Minn., common S. R., Apl. 17–Oct. 23.

An abundant Sparrow known only to bird students. It prefers fields to door-yards; lives much on the ground, and its darting flight, followed by a sudden dive to cover, and insignificant song all combine to make it rather difficult of identification. It nests in May, laying 4–5 white, speckled eggs in a nest on the ground.

GRASSHOPPER SPARROW

Ammodramus savannarum australis. Case 7, Fig. 16

A small, short-tailed Sparrow, without streaks on the underparts and a back pattern which suggests 'feather scales.' L. 5¼.

Range. Eastern United States, nesting as far north as southern Minnesota, and southern New Hampshire; winters from southern Illinois and North Carolina to the tropics. The Florida Grasshopper Sparrow (*A. s. floridanus*) a smaller, darker race, is resident in the Kissimmee prairies of south central Florida.

Washington, very common S. R., Apl. 17–Nov. 20. Ossining common S. R., Apl. 27–Oct. 23. Cambridge, rare S. R., May 16–Sept. 1. N. Ohio, common S. R., Apl. 20–Sept. 20. Glen Ellyn, not common S. R., May 4–Sept. 13. SE. Minn., common S. R., Apl. 25–Sept. 6.

Grasshopper, he is called, because his unmusical little song, *pit-tŭck, zee-e-e-e-e*, sung from a low perch, resembles the sound produced by that insect. He is a common inhabitant of old fields, where sorrel and daisies grow, and when flushed at one's feet darts away to drop suddenly to the ground beyond. The 4–5, white, spotted eggs are laid in a ground nest in late May or early June.

HENSLOW'S SPARROW

Passerherbulus henslowi henslowi. Case 7, Fig. 17

With the general proportions of the Grasshopper Sparrow, but the underparts distinctly streaked and the nape olive. L. 5.

Range. Nests from southern Missouri and Virginia to central Minnesota and New Hampshire; winters in the Southern States.

Washington, common S. R., Apl. 10–Oct. 21. Ossining, rare T. V., Oct. 5–Oct. 10. Cambridge, very rare S. R. N. Ohio, S. R., Glen Ellyn, not common S. R., May 8–Sept. 26. SE. Minn., common S. R.

Henslow's Sparrow lives in isolated and sometimes widely separated communities, frequenting wet meadows in summer, but visiting, also, dry fields in winter. It has the general habits of the Grasshopper Sparrow and its notes are equally unmusical. The 4–5 grayish white, thickly speckled eggs are laid in a ground nest the latter half of May.

LECONTE'S SPARROW

Passerherbulus lecontei. Case 7, Fig. 18

The underparts are but slightly streaked, the crown is striped, and the nape reddish brown. L. 5.

Range. Nesting in the interior of North America from our border States, northward and east to Minnesota; migrates southward and south-eastward, and winters locally from South Carolina to Florida and Texas.

Glen Ellyn, not common T. V., May 4–?; Sept. 8–Oct. 6. SE. Minn, uncommon S. R., May 1–Oct. 17.

This is the third and rarest member of the trio of small, retiring Sparrows of which the Grasshopper Sparrow is the

commonest. It is found east of the Mississippi only in the winter when it may be associated with the Grasshopper and Henslow's Sparrows.

SHARP-TAILED SPARROW

Passerherbulus caudacutus. *Case 6, Fig. 47*

A buffy Sparrow with the underparts sharply streaked with black. L. 5¾.

Range. Salt marshes of the Atlantic coast; nests from Virginia to Massachusetts; winters from New Jersey to Florida.

Cambridge, formerly common S. R., but occurs no longer.

An abundant inhabitant of salt marshes. There is, or was, a colony on the Hudson River immediately south of the long pier from which Piermont takes its name, but with this exception I have never seen this Sparrow beyond the sound of the surf. It runs about through the thick marsh grasses taking wing only when hard pressed. Its song is short and insignificant. It nests on the ground, the 3–4 grayish white, finely speckled eggs being laid in late May or early June.

NELSON'S SHARP-TAILED SPARROW

Passerherbulus nelsoni nelsoni

Resembles the Sharp-tailed but is smaller and has the throat, breast and sides deeper, very slightly, if at all, streaked with blackish; the upperparts more broadly margined with whitish. L. 5¼.

Range. Nests in the interior from South Dakota northward to Great Slave Lake; migrates south to Texas and southeast through New York and Massachusetts to North Carolina and Florida.

Washington, rare T. V., May–Sept. Ossining, tolerably common T. V., Sept. 28–Oct. 17. Cambridge, formerly uncommon T. V. Glen Ellyn, one record, Oct. 2, 1893. SE. Minn., uncommon T. V.

This is a fresh-water representative of the Sharp-tail which nests in the prairie sloughs of the interior and reaches the Atlantic coast during its migrations and in the winter.

It resembles the Sharp-tail in habits and when on the coast, may be found associated with it.

The Acadian Sharp-tailed Sparrow (*P. n. subvirgatus*) is similar to the Sharp-tailed Sparrow but is paler above; the throat, breast and sides are washed with cream-buff and indistinctly streaked with ashy. It nests on the salt marshes of the Atlantic coast from Maine to Cape Breton and in Prince Edward Island; and winters from South Carolina to Florida. In general habits it resembles the two preceding.

The three Sharp-tails may be distinguished chiefly by the color and markings of the breast. In the Sharp-tail these are *pale* buff *distinctly* streaked with blackish. In Nelson's they are *deep* buff lightly if at all streaked. In the Acadian they are cream-buff indistinctly streaked with *grayish*. The Sharp-tail may be known from the other two by its distinct black marks below, but the other two cannot certainly be distinguished from each other in life where both may be expected to occur.

SEASIDE SPARROW

Passerherbulus maritimus maritimus. Case 6, *Fig.* 46

An olive-greenish Sparrow, with a yellow mark before the eye and on the bend of the wing; the underparts *not* distinctly streaked. L. 6.

Range. Salt marshes of the Atlantic Coast; nests from Virginia to Massachusetts; winters from Virginia to Georgia.

In the Piermont marsh, referred to under the Sharp-tailed Sparrow, there are Seasides as well as Sharp-tails, but this is the only place in which I have seen Seasides away from the sea. There they are abundant in the grassy marshes. Their song is weak and unattractive. Like the Sharp-tail they nest on the ground, laying 3–4 white or bluish white eggs, clouded or finely speckled with cinnamon-brown, the latter part of May.

This northern Seaside Finch is migratory, coming the latter part of April and remaining until the latter half of October, but in the South there are several races which for the most part are resident in the same locality throughout the year. Thus we have:

Macgillivray's Seaside Sparrow (*P. m. macgillivraii*).—Atlantic Coast from North Carolina south to Matanzas Islet, Florida. Dusky Seaside Sparrow (*P. nigrescens*), an almost black species from Merritt's Island, at the head of Indian River, Florida. Cape Sable Sparrow (*P. m. mirabilis*), Cape Sable, Florida. Scott's Seaside Sparrow (*P. m. peninsulæ*), Gulf Coast of Florida from Tampa to St. Marks; Northwest Florida Sparrow (*P. m. juncicola*) Coast of Florida west of St. Marks; Alabama Seaside Sparrow (*P. m. howelli*), Coast of Alabama and Mississippi. Louisiana Seaside Sparrow (*P. m. fisheri*), Coast of Louisiana to Northeast Texas; and Sennett's Seaside Sparrow (*P. m. sennetti*), Coast of Texas from Galveston at least to Corpus Christi.

LARK SPARROW

Chondestes grammacus grammacus. Case 7, Fig. 19

The chestnut and white head markings and the white-tipped tail-feathers are conspicuous field-marks. L. 6¼.

Range. Mississippi Valley; nests from Louisiana to Minnesota and Ohio; winters from Mississippi southward; casual east of the Alleghanies, chiefly in the fall.

Washington, A. V., Aug., two captures. N. Ohio, rare S. R., Apl. 28. Glen Ellyn, local and uncommon S. R. SE. Minn., common S. R., Apl. 20–Aug. 2.

Few field experiences have given me more pleasure than the discovery near my home at Englewood one November 2, many years ago, of a Lark Finch—one of the 'casuals' which had presumably been carried far from its course by a severe storm of the preceding days. The bird's strongly marked face and conspicuously white-tipped

tail-feathers made an impression which testifies to their value as field-characters. In its own range this beautiful Sparrow is a sweet-voiced inhabitant of the fields, nesting on the ground or in low trees and bushes, and laying 3–5 white eggs, spotted and blotched with blackish, in May.

HARRIS'S SPARROW

Zonotrichia querula. Case 7, Fig. 21

A large Sparrow, larger even than the Fox Sparrow; with a pinkish bill, the crown, throat and breast more or less blackish; cheeks buff. L. 7½.

Range. Interior of North America, nesting in North Carolina; winters from Kansas to Texas; rare east of Wisconsin. Glen Ellyn, one record, May 19. SE. Minn., common T. V., May 6; Sept. 21–Oct. 25.

When migrating this Sparrow reminds one of a White-throat. It has a sharp *clink* note and frequents brier patches and bushy places.

WHITE-CROWNED SPARROW

Zonotrichia leucophrys. Case 7, Fig. 22

Resembles the White-throat but throat gray, like the breast, space before the eye black, not yellow, white in the crown more conspicuous. L. 6¾.

Range. Nests in Canada; winters from Virginia and Ohio to Mexico; not a common migrant in the Atlantic States.

Washington, irregularly common W. V. and T. V., May 1–17; Oct. 7–Nov. 20. Ossining, rare T. V., May 9–26; Oct. 3–30. Cambridge, uncommon T. V., May 12–22; Oct. 1–20. N. Ohio, common T. V., Apl. 22–May 20; Sept. 5–Oct. 16. Glen Ellyn, not common T. V.; chiefly spring, Apl. 24–May 31; Oct. 2–21. SE. Minn., common T. V., Apl. 30–; Sept. 26–Oct. 14.

This distinguished-looking cousin of our White-throated Sparrow is rare enough in the Eastern States, always to command our attention when we are so fortunate as to meet him. He resembles the White-throat in habits and choice of haunts but his song has a tender, appealing

quality, lacking in the White-throat's more cheerful lay, charming as that is.

WHITE-THROATED SPARROW

Zonotrichia albicollis. Case 2, Figs. 45, 46; Case 4, Fig. 40

The adults may be recognized at sight by their white throat, but this character is less prominent and sometimes almost wanting in young birds (Fig. 46) which will require close scrutiny. L. 6¾.

Range. Nests from northern New England and central Minnesota northward; winters from southern New England and Ohio to the Gulf.

Washington, very common W. V., abundant T. V., Mch. 18–May; Sept. 15–Dec. 16. Ossining, common T. V., Apl. 10–May 21; Sept. 20–Oct. 30; a few winter. Cambridge, very common T. V., Apl. 25–May 15; Oct. 1–Nov. 10; a few winter. N. Ohio, common T. V., Apl. 1–May 21; Sept. 10–Nov. 7. Glen Ellyn, common T. V., Apl. 9–May 26; Sept. 13–Nov. 7. SE. Minn., common T. V., Apl. 8–; Sept. 2–Nov. 13.

This clear-voiced whistler is known to many persons who have never seen it. When anyone returning from the bird's summer range tells me "I heard a bird sing like this," I know before he whistles a note that he will probably imitate the White-throat. Fortunately the song has so much character and its intervals conform so closely to those of our musical scale, that a recognizable imitation of it is within the power of everyone. There is much variation in the arrangement of the notes and migrants never seem to sing with the power of nesting birds, nor do fall songs compare in volume or execution with those of spring. The call-note is a characteristic sharp *clink*.

The White-throat is abundant, migrating and wintering in companies which frequent bushy places, hedgerows and undergrowth generally. The nest is placed on the ground or in bushes in late May or early June. The eggs, 4–5 in number, are bluish white, speckled or blotched with brown.

TREE SPARROW

Spizella monticola monticola. *Case 2, Fig. 44; Case 4, Fig. 46*

A dusky spot in the center of the breast and a reddish brown cap and streak behind the eye are distinguishing characters. L. 6¼.

Range. Nests in Canada; winters from southern Canada south to Arkansas and South Carolina.

Washington, abundant W. V., Oct.–Apl. 1. Ossining, common W. V., Oct. 10–Apl. 27. Cambridge, common W. V., abundant T. V., Oct. 25–Nov. 25; Mch. 20–Apl. 20. N. Ohio, abundant W. V., Oct. 24–May 3. Glen Ellyn, common W. V., Oct. 4–Apl. 28. SE. Minn., common T. V., Oct. 6–May 5; a few winter.

From October to April companies of Tree Sparrows harvest the season's crop of weed seeds, feeding usually near woods or hedge-rows to which they go to rest and roost. Their merry chatter is one of the season's most cheerful notes, and in the spring we may hear their canary-like song.

CHIPPING SPARROW

Spizella passerina passerina. *Case 4, Fig. 45; Case 5, Fig. 31*

In summer, the chestnut cap, black bill, and whitish line over the eye mark the 'Chippy'; but in the fall and winter the crown is like the back, the line over the eye is brownish, and the bill is brown; but the gray rump, shown well in flight, is a good character the year around. L. 5¼.

Range. Nests from Georgia and Mississippi to Canada; winters from South Carolina to the Gulf.

Washington, common S. R., abundant T. V., Mch. 9–Nov. 11, occasionally winters. Ossining, common S. R., Apl. 9–Nov. 7. Cambridge, abundant S. R., Apl. 12–Oct. 25. N. Ohio, abundant S. R., Mch. 23–Oct. 10. Glen Ellyn, not very common S. R., Apl. 5–Nov. 5. SE. Minn., common S. R., Apl. 8–Oct. 26.

The friendly Chippy is the most familiar and domestic of any of our native Sparrows. He makes tentative visits to our piazzas and, cats permitting, will take up his residence there, building a neat, hair-lined nest in the vines or a nearby bush. Unassuming in voice as he is in

manner, his *Chippy-chippy-chippy*, many times repeated, expresses contentment, even if it does not attain high musical rank. Madame Chippy has fine taste in eggs, laying, in early May, little blue gems, beautifully marked with brown or black.

CLAY-COLORED SPARROW

Spizella pallida. Case 6, Fig. 48

The Clay-colored Sparrow resembles a winter Chipping Sparrow, but is paler and has a white line over the eye and a brownish rump. L. 5½.

Range. Interior states east to Illinois; winters from Texas southward. SE. Minn., common S. R., Apl. 26–Oct. 19.

A Chipping Sparrow of the Plains which nests on the ground and in low bushes. It is not common east of the Mississippi.

FIELD SPARROW

Spizella pusilla pusilla. Case 4, Fig. 43; Case 5, Fig. 14

The upperparts are brighter reddish brown than in any of our other Sparrows, and the bill is 'pinker.' L. 5½.

Range. Nests from northern Florida and central Louisiana to Minnesota and Maine; winters from New Jersey and Illinois to the Gulf States.

Washington, very common P. R. Ossining, common S. R., Apl. 2–Nov. 7. Cambridge, common S. R., Apl. 12–Nov. 1; casual in winter. N. Ohio, abundant in summer, Mch. 6–Oct. 25. Glen Ellyn, tolerably common S. R., Mch. 27–Oct. 11. SE. Minn., common S. R., Apl. 1–Dec. 28.

'Bush Sparrow,' Mr. Roosevelt always called this bird, and the name gives a better conception of its haunts than that of Field Sparrow, since it is found in bush-grown fields. From a bush-top it sings its clearly whistled, sweet, appealing song, varying the relation of notes and trills, but never their musical quality. In a bush also it nests, laying 3–5 white eggs, marked with reddish brown, in May.

SLATE-COLORED JUNCO

Junco hyemalis hyemalis. *Case 2, Fig. 43; Case 4, Fig. 41*

The plumage of the female is tinged with brownish, but the prevailing tone is slate-gray, unlike that of any of our other Sparrows. The white outer-tail feathers are conspicuously flashed in flight. L. 6¼.

Range. Nests from northern New England and northern New York to Canada and southward in the mountains to Pennsylvania; winters in all the Eastern States. The Carolina Junco (*J. h. carolinensis*), a slightly larger race without a brownish tinge, nests in the higher parts of the Alleghanies from Maryland to northern Georgia, descending to the adjacent lowlands in winter.

Washington, abundant W. V., Sept. 26–May 12. Ossining, common W. V., Sept. 19–May 4. Cambridge, rather common W. V., abundant T. V., Sept. 20–Nov. 25; Mch. 20–Apl. 20. N. Ohio, abundant W. V., Oct. 2–May 5. Glen Ellyn, W. V., abundant spring and fall, Aug. 30–May 13. SE. Minn., common T. V., Mch. 4–; Sept. 20–Nov. 12.

Gray skies and a snow-covered earth are the Junco colors, and when he flashes them along the hedgerows and wood borders we know that although it is only late September, winter will soon be with us. From that time until April the Junco is of our commonest birds. He visits our food-shelf and roosts in our evergreens, becoming almost as domestic as the Chipping Sparrow. The Junco's call-notes are a sharp *tsip*, a contented *chew-chew-chew*, and a sharp kissing call. Its modest, musical little trill we shall not hear until spring. The nest is built on the ground, and the 4–5 white, speckled, or spotted, eggs are laid late in May.

BACHMAN'S SPARROW

Peucæa æstivalis bachmani

With a general resemblance to a Field Sparrow but bill black and larger, cheeks and underparts more buffy, tail shorter, no evident wing bars.

Range. Southeastern United States from central Georgia to Virginia and from northwestern Florida to central Illinois; winters from North Carolina to northern Florida.

Where 'scrub' oaks grow beneath the pines, or post, or white oaks form open woods, there one may look for this rather retiring, sweet-voiced Sparrow. If one can imagine a Hermit Thrush singing the Field Sparrow's chant, he will have some conception of the rare quality of Bachman's Sparrow's song. The nest is built on the ground, the white unmarked eggs being laid early in May.

The Pine Woods Sparrow (*P. æ. æstivalis*), is a darker race, more streaked above with black. It is resident in Florida (except the northwestern part) and southern Georgia where it frequents pine forests undergrown with scrub palmetto.

SONG SPARROW

Melospiza melodia melodia. *Case 2, Fig. 34; Case 4, Fig. 42*

Streaked below, with a conspicuous spot in the center of the breast.

Range. Most of North America, the eastern form west to the Rockies, nesting from Virginia and Missouri to Canada and wintering from Illinois and Massachusetts to the Gulf.

Washington, common P. R., abundant T. V., Mch. and Oct. Ossining, common P. R. Cambridge, very abundant S. R., Mch. 10–Nov. 1; locally common W. V. N. Ohio, P. R., abundant in summer, common in winter; Glen Ellyn, common S. R. Feb. 12–Nov. 2. SE. Minn., common S. R., Mch. 16–Nov. 11.

If the so-called 'English' Sparrow is the European Sparrow, the Song Sparrow is the American Sparrow. He is found in every State and from the Valley of Mexico to Alaska. He is abundant, musical, and familiar and probably better known than any other member of his family native to this country. His is one of the first birds' songs to be heard in the spring, and the last in the fall, and when in midsummer, the adults, while molting, are silent, the rambling, formless song of the young may be heard.

Usually the Song Sparrow is found near water and not far from bushes into which he flies when alarmed. Then

we hear his characteristic call-note, an impatient *chimp, chimp*, unlike that of any other of our Sparrows. The nest is built on the ground and the 4–5 bluish white, brown-marked eggs are laid late in April.

LINCOLN'S SPARROW

Melospiza lincolni lincolni. Case 7, Fig. 15

A broad band of buff across the streaked breast.

Range. Chiefly western United States; in the East, nests from northern New York and northern Minnesota into Canada; winters from Mississippi to Central America; rare east of the Alleghanies.

Washington, rare T. V., May 8–21; Sept. 30–Oct. 1. Ossining, rare T. V., Sept. 29–Oct. 16. Cambridge, not uncommon T. V., May 15–May 25; Sept. 14–Oct. 10. N. Ohio, tolerably common T. V., Apl. 25–May 25. Glen Ellyn, not common T. V., fall records only, Sept. 11–Oct. 9. SE. Minn., common T. V., Apl. 17–; Sept. 10–Oct. 30.

We know the species only as a rare, retiring migrant, frequenting hedgerows and undergrowth. I have never heard its song while migrating.

SWAMP SPARROW

Melospiza georgiana. Case 4, Fig. 44; Case 5, Fig. 22

Note the bright chestnut cap, grayish, unstreaked breast, and reddish brown rump of the summer plumage; in winter, the crown is darker and streaked with black. L. 5¾.

Range. Nests from New Jersey and Illinois to Canada; winters from Nebraska and New Jersey to the Gulf.

Washington, very common T. V., Apl. 12–May 19; Sept. 28–Oct. 29; a few winter. Ossining, tolerably common S. R., Apl. 4–Dec. 2; a few winter. Cambridge, abundant S. R., Apl. 12–Nov. 10; a few winter. N. Ohio, common T. V., Mch. 23–May 20. Glen Ellyn, tolerably common T. V., Apl. 2–May 26; Sept. 2–Oct. 24; possibly S. R. SE. Minn., common S. R., Apl. 5–Nov. 18.

The Swamp Sparrow is a Sparrow of the marshes whose *tweet-tweet-tweet* many times repeated, is associated with the music of Marsh Wrens. It nests on the ground in May, laying eggs not unlike those of the Song Sparrow.

FOX SPARROW

Passerella iliaca iliaca. *Case* 4, *Fig.* 37; *Case* 5, *Fig.* 7

A large, bright, reddish brown Sparrow, which, because of its red-brown tail, and in spite of its stout bill, is sometimes mistaken for the Hermit Thrush. L. 7¼.

Range. Nests in northern Canada; winters from Ohio and Maryland to the Gulf States.

Washington, very abundant T. V., Mch. 13–May 11; Oct. 23–Nov. 15; a few winter. Ossining, tolerably common T. V., Mch. 4–Apl. 20; Oct. 14–Nov. 28. Cambridge, abundant T. V., Mch. 15–Apl. 12; Oct. 20–Nov. 15; occasional in winter. N. Ohio, common T. V., Mch. 12–Apl. 23; Oct. 1–Nov. 16. Glen Ellyn, fairly common T. V., Mch. 11–Apl. 28; Sept. 22–Nov. 8. SE. Minn., common T. V., Mch. 12–; Sept. 17–Nov. 12.

A vigorous scratcher in the undergrowth who, using both feet at once, kicks the leaves out behind him; a master musician among our Sparrows whose loud, clear, joyous notes form one of our most notable bird songs. We hear it only for a brief time in spring and fall as the birds pass us on their migration.

TOWHEE

Pipilo erythrophthalmus erythrophthalmus. *Case* 4, *Figs.* 32, 33; *Case* 5, *Fig.* 51

The female is brown where the male is black; both are unmistakable L. 8¼.

Range. Nests from northern Georgia and central Kansas; winters from Ohio and Potomac Valleys to the Gulf.

Washington, common S. R., very common T. V., Apl. 5–Oct. 21; a few winter. Ossining, common S. R., Apl. 21–Oct. 31. Cambridge, common S. R., Apl. 25–Oct. 15. N. Ohio, common S. R., Mch. 10–Oct. 25. Glen Ellyn, not common, S. R., Mch. 30–Nov. 18. SE. Minn., common S. R., Apl. 11–Nov. 8.

Chewink, towhee, the clear, emphatic, strongly accented call announces the presence of a bird whose colors are as distinctive as its notes. The Towhee feeds on the ground in and near bushy places, but when the desire to sing comes upon him he leaves his lowly haunts and taking a more or less exposed perch, fifteen to twenty feet from

the ground, utters his *sweet-bird-sin-n-n-g*, with an earnestness which goes far to atone for his lack of striking musical ability. The nest is built on the ground and the 4–5 white, finely speckled eggs are laid during the first half of May.

The White-eyed Towhee (*P. e. alleni*) of Florida and the coast region north to Charleston, South Carolina, has the eye yellowish instead of red and the white markings are more restricted. Its call is higher than that of the northern bird and its song shorter.

CARDINAL

Cardinalis cardinalis cardinalis. Case 4, *Figs.* 34, 35

The male, with his conspicuous crest and bright colors, can be confused with no other species; the female is much duller and the crest is less prominent but still evident. L. 8¼.

Range. Resident from the Gulf States to southern New York and northern Ohio; rarely found further north.

Washington, common P. R.; less common than formerly. Ossining, A. V. Cambridge, irregular but not very infrequent at all seasons. N. Ohio, common P. R. Glen Ellyn, rare S. R. SE. Minn., rare.

Next to the Mockingbird's medley, the rich, mellow whistle of the Cardinal is the most prominent bird voice in the choir of southern songsters. Passing most of the time in the undergrowth, where, in spite of his brilliant colors, he readily conceals himself, he makes no attempt, when singing, to hide his fiery plumes, but selecting a conspicuous perch, challenges the attention of the world.

The female Cardinal also sings, but her song has much less volume than that of her mate, and is more rarely heard. The call-note of both sexes is a minute, sharp, *cheep*, which one would attribute to a bird half their size. The Cardinal nests in bushes, laying 3–4 whitish eggs speckled and spotted with brown, in April.

The Florida Cardinal (*C. c. floridanus*), a slightly smaller, deeper colored (especially in the female) race of the preceding, inhabits the peninsula of Florida.

BLUE GROSBEAK

Guiraca cærulea cærulea. Case 6, Figs. 52, 53

Should be confused only with the Indigo Bunting, but it is larger and the male is darker and has brown wing-bars. L. 7.

Range. Nests from Florida to Maryland and southern Illinois; winters in the tropics, uncommon east of the Alleghanies.

Washington, very uncommon, S. R., May 1–Sept. 20. Cambridge, A. V., one instance, May.

The Blue Grosbeak is an unfamiliar bird to most eastern students. Ridgway states that its haunts resemble those of the Field Sparrow or Indigo Bunting. Its call is a strong, harsh *ptchick*, its song a beautiful, but rather feeble warble. The nest is usually built in bushes and the 3–4 pale bluish white eggs are laid in May.

ROSE-BREASTED GROSBEAK

Zamelodia ludoviciana. Case 7, Figs. 25, 26

The male needs no introduction; the streaked plumage of the female betrays her Sparrow ancestry; the white stripe over her eye is a conspicuous mark. Young males in the fall resemble the female, but have a rose-tinted breast. L. 8.

Range. Nests from central Kansas and central New Jersey north to Canada, and, in the mountains, south to northern Georgia; winters in the tropics.

Washington, rather common T. V., May 1–30; Aug. 29–Oct. 6. Ossining, tolerably common S. R., May 3–Oct. 1. Cambridge, very common S. R., May 10–Sept. 10. N. Ohio, common S. R., Apl. 27–Sept. 15. Glen Ellyn, fairly common S. R., common T. V., Apl. 27–Sept. 28. SE. Minn., common S. R., Apl. 27–Sept. 23.

Distinguished alike by plumage and song, the Rose-breast is one of our most notable bird citizens. His song resembles in form that of the Robin, but has a more lyrical, flowing, joyous quality, and, unlike the Robin,

he often sings while flying. The call-note of both sexes is a sharp *peek* which, like the Cardinal's *cheep*, seems too small for the bird.

The Rose-breast lives and nests in woodland, particularly second-growths, building a frail nest ten to twenty feet from the ground. The 4–5 blue, brown-marked eggs are laid the latter half of May.

INDIGO BUNTING

Passerina cyanea. Case 7, Figs. 23, 24

The male, well seen, is unmistakable. The female is very 'sparrowy' and, unless one gets a suggestion of blue in her plumage, can best be identified by her unsparrow-like, sharp *pit.* L. 5¼.

Range. Nests from Georgia and Louisiana to Canada; winters in the tropics.

Washington, common S. R., Apl. 29–Oct. 9. Ossining, common S. R., May 4–Oct. 17. Cambridge, common S. R., May 15–Oct. 1. N. Ohio, common S. R., Apl. 26–Oct. 10. Glen Ellyn, fairly common S. R., May 1–Sept. 22. SE. Minn., common S. R. Apl. 28–Oct. 2.

"July, July, summer-summer's here; morning, noontide, evening, list to me" the Indigo sings in rather hard but brilliant little voice. To me the words express the rhythm as well as the spirit of the song. We hear them most often in bushy fields and open second-growths, along hedge-rows or from briery clumps in which the bird's nest may be hidden. The pale, bluish white eggs are laid the latter half of May.

PAINTED BUNTING

Passerina ciris. Case 6, Figs. 49, 50

The male is one of our most brilliantly colored birds, the female has the color of a Vireo but the bill of a Sparrow.

Range. Southern States north to southeastern North Carolina and southern Kansas; winters from southern Florida southward.

"Painted" Bunting he is called, but the brilliancy and luster of his plumage were not painted by human hands.

'Nonpareil' he has also been named, and, in the eastern United States, at least, he is without equal in the brightness of his colors. The bird's haunts are not unlike those of the Indigo Bunting, and its song is said to resemble the Indigo's but to be more feeble. It builds in bushes and low trees, laying 3–4 bluish white, brown-spotted eggs in May.

DICKCISSEL

Spiza americana. *Case 7, Fig. 20*

The yellow on the breast and, in the male, black crescent will distinguish this species from all its Sparrow kin. L. 6.

Range. Chiefly prairies of the Mississippi Valley, from Texas and Mississippi north to Minnesota and southern Ontario; now rare east of the Alleghanies.

Washington, formerly "very abundant," now seen only occasionally, May–Aug. Cambridge, casual, found nesting at Medford, June 9. 1877, where several birds were observed; not uncommon in 1833–34 (see Bull. Nutt. Orn. Club, III, 1878, 45, 190). N. Ohio, rare S. R., May 1. Glen Ellyn, rather rare and local S. R., formerly common, May 3–Sept. 5. SE. Minn., common S. R., May 11–Aug. 20.

The Dickcissel is a bird of the fields who, from a weed-stalk or fence by the wayside, sings his unmusical *dick-dick cissel, cissel, cissel.* The nest is built on the ground or in a bush and the 4–5 pale blue eggs are laid the latter half of May.

TANAGERS. FAMILY TANGARIDÆ

SCARLET TANAGER

Piranga erythromelas. *Case 7, Figs. 27, 28*

The black wings and tail of the male will distinguish him from our other two red birds—the Cardinal and Summer Tanager. The olive-green female may be known from all our other olive-green birds by her larger size. L. 7¼.

Range. Nests from northern Georgia and southern Kansas to Canada; winters in the tropics.

Washington, common T. V., less common S. R., Apl. 17–Oct. 15. Ossining, common S. R., May 4–Oct. 9. Cambridge, rather common S. R., May 12–Oct. 1. N. Ohio, common S. R., Apl. 28–Oct. 2. Glen Ellyn, not common S. R., Apl. 30–Sept. 29. SE. Minn., common S. R., Apl. 29–Sept. 11.

As a family Tanagers are the most strikingly colored of American birds, but among the nearly 400 species none appears more brilliant in life than the male Scarlet Tanager. The leaf-colored female is as difficult to see as the male is conspicuous. Both have the same characteristic call—*chip-chûrr, chip-chûrr.* The song suggests a Robin's but is more forced and has a hoarse undertone. They live and nest in the woods, building on a horizontal limb 10–20 feet up. The 3–4 greenish blue, brown-marked eggs are laid late in May.

SUMMER TANAGER

Piranga rubra rubra. Case 5, Figs. 33, 34

The male is usually red like the Cardinal, but lacks the Cardinal's crest; the female is more yellow than the female of the Scarlet Tanager.

Range. Southern States; nesting north to Maryland and Illinois; winters in the tropics.

Washington, uncommon S. R., Apl. 18–Sept. 19. Cambridge, one record.

The "Summer Redbird's" *chicky-tucky-tuck,* is as clearly pronounced and unmistakable as the Scarlet Tanager's *chip-chûrr.* Its song is somewhat sweeter than that of its scarlet cousin, but bears a general resemblance to it. Both pine and deciduous woods are inhabited by this bird. Its nesting habits resemble those of the Scarlet Tanager.

SWALLOWS. FAMILY HIRUNDINIDÆ

PURPLE MARTIN

Progne subis subis. Case 5, Fig. 25

Largest of our Swallows. The female is duller above than the male, and below is brownish gray. L. 8.

Range. Nests locally from the Gulf to Canada; winters in the tropics.

Washington, rather common S. R., Apl. 1–Sept. 14. Ossining, tolerably common S. R., Apl. 27–Sept. 11. Cambridge, formerly locally common S. R., Apl. 20–Aug. 25. N. Ohio, common S. R. Apl. 1–Sept. 5. Glen Ellyn, local S. R., Mch. 23–Sept. 10. SE. Minn., common S. R., Apl. 1–Sept. 9.

Fortunate is the man whose hospitality the Martins accept. Their cheery notes and sociability make them the best kind of guests. The Audubon Society will send one plans for a Martin house, and tell one where to place it. Martins nest in May and lay white eggs.

CLIFF SWALLOW

Petrochelidon lunifrons lunifrons. Case 6, Fig. 55

The rusty rump is distinctive. L. 6.

Range. Nests locally from Georgia to Canada; winters in the tropics.

Washington, rare S. R., Apl. 10–Sept. –? Ossining, common S. R., May 1–Sept. 12. Cambridge, S. R., much less than formerly. Apl. 28–Aug. 25. N. Ohio, tolerably common S. R., Apl. 6–Sept. 25. Glen Ellyn, not common, local S. R., Apl. 25–Sept. 16. SE. Minn., common S. R., Apl. 13–Sept. 12.

Cliff Swallow it is in the West, but "Eave" Swallow it should be in the East where the rows of flask-shaped mud nests cluster thick beneath projecting roofs. They prefer unpainted buildings and the modern barn rarely knows them. The white, brown-spotted eggs are laid in the latter half of May.

BARN SWALLOW

Hirundo erythrogaster. Case 5, Fig. 32

Chestnut underparts and a forked tail are the chief characters of this beautiful Swallow. L. 7.

Range. Nests from North Carolina and Arkansas to Canada; winters in the tropics.

Washington, common S. R., more abundant T. V., Mch. 30–Sept. 17. Ossining, common S. R., Apl. 15–Sept. 22. Cambridge, common S. R., but fast decreasing, Apl. 20–Sept. 10. N. Ohio, abundant S. R., Mch. 30–Sept. 22. Glen Ellyn, S. R., fairly common and increasing. Apl. 7–Sept. 1. SE. Minn., common S. R., Apl. 28–Aug. 31.

Barn Swallows are far more beautiful, more graceful and more companionable than Purple Martins. But while we are erecting special dwellings for the Martins we are making our barns Swallow-proof. A pair of Barn Swallows are not only cheerful neighbors but good investments. Let us make it possible for them to enter the hay-mow. We may even supply shelves as foundations for their open mud nests. The white, spotted eggs are laid in the latter half of May.

TREE SWALLOW

Iridoprocne bicolor. Case 5, Fig. 24

Silky white below and shining bluish green above; young birds are mouse-colored above but below are snowy white, unmarked, as in the adult. L. 6.

Range. Nests chiefly from southern New England northward and winters from South Carolina to Central America.

Washington, common T. V., Mch. 26–May 26; July 8–Oct. 14. Ossining, common T. V., Apl. 4–May 26; Aug. 4–Oct. 16. Cambridge, S. R., formerly common, now common only as a migrant, Apl. 5–Oct. 8. N. Ohio, common S. R., Apl. 10–Sept. 20. Glen Ellyn, not common T. V., rare S. R., Apl. 21–Sept. 8. SE. Minn., common S. R., Mch. 30–Aug. 31.

We see comparatively few Tree Swallows during the spring, but from July to October, as they journey slowly southward, they are the most abundant members of their family. In countless thousands long ropes of Swallows

crowd the wayside wires from pole to pole. At night, with others of their tribe, they roost in the marshes.

Tree Swallows they are called because they nest in hollow trees and, like some other hole-nesting birds, they may be induced to occupy nesting-boxes, making a welcome addition to our list of bird tenants. The 4–7 white eggs are laid in May.

BANK SWALLOW

Riparia riparia. *Case* 6. *Fig.* 54

Note the small size, dull plumage, and breast-band. L. 5¼.

Range. A native of the Old World as well as of the New. In North America nesting from Louisiana and Virginia nearly to the Arctic Circle; winters in the tropics.

Washington, common S. R., more common T. V., Apl. 13–Sept. 19. Ossining, common S. R., Apl. 18–Oct. 1. Cambridge, formerly common S. R., Apl. 28–Sept. 1; common T. V. N. Ohio, common S. R., Apl. 6–Sept. 20. Glen Ellyn, fairly common T. V.; a few S. R., Apl. 22–Sept. 3. SE. Minn., common S. R., Apl. 10–Sept. 25.

The Bank Swallow is a bird of the air who tunnels the earth for a nesting-place. Where river or road has left a bank, its face may be dotted with the entrances to the Bank Swallow's dwellings. At the end of two or three feet the nest of grass and feathers is placed, fit receptacle for the pearl-white eggs, which are usually laid the latter half of May.

During the migrations the Bank Swallow travels with other members of its family, sharing their roost in the marshes by night and their wayside perch by day.

ROUGH-WINGED SWALLOW

Stelgidopteryx serripennis. *Case* 6, *Fig.* 56

With the general appearance of the Bank Swallow, but slightly larger, grayer below, and with no breast-band. L. 5¾.

Range. Nests from the Gulf States north to Massachusetts and Minnesota; winters in the tropics.

Washington, common S. R., Apl. 2–Sept. 3. Ossining, common S. R., Apl. 17–Aug. 12. N. Ohio, common S. R., Apl. 15–Sept. 20. SE. Minn., common S. R., Apl. 14–Aug. 26.

Least common of our Swallows. It nests in small colonies of about half a dozen pairs, sometimes in holes, at others under bridges, crevices in cliffs and similar situations. In the fall, it flocks with other species of its family. Its 4–8 white eggs are laid the latter half of May.

WAXWINGS. FAMILY BOMBYCILLIDÆ

BOHEMIAN WAXWING

Bombycilla garrula

Similar to the Cedar Waxwing, but larger, the primary coverts and secondaries tipped with white, the primaries tipped with white or yellow, the under tail-coverts chestnut. L. 8.

Range. Western Canada; in winter east to Minnesota and rarely as far as Connecticut.

Glen Ellyn, one record, Jan. 22, 1908. SE. Minn., irregular W. V., until Apl. 1.

There are comparatively few authentic records of this beautiful bird east of the Alleghanies. Enthusiastic bird-students are, I fear, apt to give Waxwings, seen in winter, the benefit of the doubt and call them 'Bohemians.' Look especially for the white marks on the Bohemian's wings. Its large size might not be apparent unless the two species were seen together.

CEDAR WAXWING

Bombycilla cedrorum. *Case* 2, *Fig.* 40; *Case* 4, *Fig.* 54

Crest usually conspicuous; tail tipped with yellow; a black 'bridle.'

Range. Nests from North Carolina and Kansas to Canada; winters irregularly throughout the United States.

Washington, very common P. R., less so in winter. Ossining, common P. R. Cambridge, not common P. R., common S. R., abundant T. V. in spring, Feb. 1–Apl. 25. N. Ohio, irregularly

common in summer. Glen Ellyn, S. R., Jan. 21–Sept. 24; occasional W. V. SE. Minn., common S. R., Feb. 25–Sept. 28.

A Waxwing's crest is as expressive as a horse's ears. One moment it points skyward the next it flattens and disappears. They are as sociable as "Love Birds," traveling in small flocks which, like one bird, dive into a tree and perch so close together that often several will be almost touching, and with common accord they take wing. They feed mainly on small fruit both wild and cultivated but are also expert flycatchers. They nest in June, usually in shade or fruit trees, building a well-made nest for the beautiful, clay-colored, black-spotted eggs.

SHRIKES. FAMILY LANIIDÆ

NORTHERN SHRIKE

Lanius borealis. Case 2, Fig. 56

Larger than the Migrant and Loggerhead Shrikes with a grayish, not black, forehead and a lightly barred, not plain white breast. L. 10½.

Range. Nests in Canada, winters south to Texas and Virginia. Washington, rare and irregular W. V., Oct.–Feb. Ossining, tolerably common W. V., Oct. 26–Apl. 17. Cambridge, common W. V., Nov. 1–Apl. 1. N. Ohio, not common W. V., Nov. 6–Apl. 3. Glen Ellyn, not common W. V., Oct. 24–June 5. SE. Minn., common W. V., Oct. 17–Mch. 28.

A grim, gray bird that comes out of the far North in the fall. His mission is death to birds and mice and he makes no attempt to disguise it but boldly advertises his presence by perching where he may be seen as well as see. Mice he can plunge on, but Sparrows, Siskins or Redpolls he may have to pursue on the wing, following every twist and turn until he reaches striking distance. Slowly he bears his victim, in his feet, to some tree there to hang it on thorn or in crotch from which it may be devoured at leisure. An executioner by birth, the Shrike or "Butcher Bird"

evidently pursues his calling with no regrets and when spring time approaches adds his voice to the chorus of bird song.

LOGGERHEAD SHRIKE

Lanius ludovicianus ludovicianus. Case 4, Fig. 55

A gray bird with black wings and tail marked with white which shows in flight; smaller than the Northern Shrike with a black forehead and unmarked breast. L. 9.

Range. Florida north to North Carolina, west to Louisiana.

The Loggerhead has the general habits of his larger northern cousin the "Butcher-bird," but he feeds, as a rule, on smaller game. Grasshoppers and lizards form the larger part of his fare and the barbed wire fences not infrequently are his shambles. A flight is ended by an upward swing to the chosen perch which may be a tree-top, a telegraph wire, or lightning-rod tip. From such a lookout he keeps a sharp watch for his prey, which he detects at surprisingly long distances; meanwhile uttering the gurgles, squeaks and pipes which constitute his song. The nest is built in hedges or low trees in early March. The 3–5 eggs are dull white thickly marked with brown and lavender.

The Migrant Shrike (*Lanius ludovicianus migrans*) is a northern race of the Loggerhead from which it differs only in being somewhat paler above and grayer below. It is a Summer Resident from Kansas and western North Carolina to Minnesota and Maine and winters from the Middle States southward.

Generally speaking, it may be said that any Shrike found north of Maryland in the winter is a Northern Shrike; that any Shrike found north of Virginia in the summer is a Migrant Shrike, and that any Shrike found south of that state in the summer is a Loggerhead.

VIREOS. FAMILY VIREONIDÆ

BLACK-WHISKERED VIREO

Vireosylva calidris barbatula

Resembles the Red-eyed Vireo but has a dusky streak on each side of the throat.

Range. Cuba and Bahamas, north in spring to southern Florida.

This is a tropical species which reaches southern Florida early in May and returns to its winter home after nesting. In general habits and notes it resembles the Red-eye.

RED-EYED VIREO

Vireosylva olivasceus. Case 6, Fig. 66

An olive-green bird, silky white below, a white line, bordered by black over the red eye, a grayish cap and no white band on the wings. L. 6¼.

Range. Nests from the Gulf to Canada; winters in the tropics.

Washington, very common S. R., Apl. 21–Oct. 17. Ossining, common S. R., Apl. 29–Oct. 19. Cambridge, abundant S. R., May 10–Sept. 10. N. Ohio, abundant S. R., Apl. 27–Oct. 1. Glen Ellyn, common S. R., May 5–Oct. 5. SE. Minn., common S. R., May 5–Sept. 15.

A tireless soliloquist, the Red-eyed Vireo repeats from our shade and fruit trees in endless succession the broken phrases of his monotonous, rambling recitation. He sings all day and he sings throughout the summer, pausing only to sleep or to swallow the caterpillar he hunts while singing. Patient, persistent mediocrity is expressed by the Red-eye's song, and only his nasal, petulant call-note, *whang*, suggests that he is not altogether satisfied with life as he finds it.

The nest, like that of our other Vireos, is a deep cup hung from between a crotch from 5 to about 40 feet above the ground. The 3–4 eggs, which are laid in late May, are white spotted with reddish brown.

WARBLING VIREO

Vireosylva gilva gilva. Case 7, Fig. 29

Smaller than the Red-eye, without black and white lines over the brown eye, the underparts faintly tinged with yellowish. L. 5¾.

Range. Nests from Louisiana and North Carolina to Canada; winters in the tropics.

Washington, rather common S. R., Apl. 21–Sept. 12. Ossining, tolerably common S. R., May 3–Sept. 18. Cambridge, locally common S. R., May 5–Sept. 15. N. Ohio, abundant S. R., Apl. 17–Oct. 10. Glen Ellyn, not common S. R., May 1–Sept. 15. SE. Minn., common S. R., May 3–Sept. 15.

While the Red-eye's song lasts the greater part of the day, the Warbling Vireo's continues for only about four seconds, then, after an interval, it is repeated. It is an unbroken strain running up and down the middle of the scale and has it in a reminder of the Purple Finch's lay. This species is less generally distributed than the Red-eye. It may be common in one locality and absent from another. Its nesting habits and eggs are much like those of the Red-eye, but the male has the singular custom of singing while it sits upon the nest.

PHILADELPHIA VIREO

Vireosylva philadelphicus. Case 7, Fig. 30

A small, olive-green Vireo, with pale yellow underparts and a whitish line over the eye. L.

Range. Nests from northern New England and northern Michigan into Canada; winters in the tropics.

Washington, very rare T. V., May; Sept. Ossining, rare T. V., Sept. 20–Oct. 20. Cambridge, rare T. V. Glen Ellyn, rather rare T. V., May 14, 15; Aug. 21–Sept. 30. SE. Minn., uncommon T. V., May 9.

Rarest of our Vireos; but few students know it as a migrant and fewer still as a nesting bird. Its song and nesting habits resemble those of the Red-eye.

YELLOW-THROATED VIREO

Lanivireo flavifrons. Case 6, Fig. 69

Breast bright yellow; a yellow ring around the eye, two white wing-bands, bill rather stout. L. 6.

Range. Nests from Florida and Texas to Canada; winters in the tropics.

Washington, common S. R., Apl. 19–Sept. 29. Ossining, tolerably common S. R., Apl. 30–Sept. 7. Cambridge, common S. R., May 6–Sept. 10. N. Ohio, common S. R., Apl. 25–Sept. 25. Glen Ellyn, not common S. R., May 2–Sept. 26. SE Minn., common S. R., Apl. 27–Sept. 15.

A less common bird than the Red-eye, but like it generally distributed through woodland, garden and orchard. Its song resembles the Red-eye's in form but is richer in tone, more deliberately uttered, and not continuous. "See me—I'm here—where are you?" he seems to say, and after a pause repeats the query.

The nest has the deep cup-shape of our other Vireo's but is externally covered with lichens. The eggs, laid the latter part of May, are white with a few specks of black or brown.

BLUE-HEADED VIREO

Lanivireo solitarius solitarius. Case 6, Fig. 68

Eye-ring and lores white, head grayish blue, underparts white, the sides yellowish; two wing-bars. L. 5½.

Range. Nests from the mountains of northern New Jersey and of Pennsylvania to Canada; winters from the Gulf States southward.

Washington, common T. V., Apl. 6–May 18; Sept. 6–Nov. 3. Ossining, tolerably common T. V., Apl. 23–May 14; Sept. 8–Oct. 20. Cambridge, common T. V., rare S. R., Apl. 20–May 8; Sept. 15–Oct. 5. N. Ohio, common T. V., Apl. 17–May 20; Sept. 1–30. Glen Ellyn, not common T. V., May 9–19; Aug. 11–Oct. 9. SE. Minn., common T. V., May 3–Sept. 28.

We know this Vireo chiefly as a migrant, one of the earliest of the group of small arboreal wood-haunting birds (Vireos and Warblers) to reach us in the spring.

Its song, as well as its movements, are deliberate. Vireo-like it peers beneath the leaves or inspects the blossoms, removing a caterpillar here or an insect's egg there, the while singing leisurely a rich-toned rendering of the Red-eye's theme.

It nests late in May, hanging its cup-shaped basket to a crotch usually five to ten feet above the ground. The eggs are white with a few black or brown spots.

The Mountain Solitary Vireo (*L. s. alticola*) has a slightly larger bill and bluer back. It nests in the mountains from Maryland to Georgia and winters southward to Florida.

WHITE-EYED VIREO

Vireo griseus griseus. Case 6, Fig. 67

White or yellowish white eyes; whitish underparts, washed with yellow on the sides. L. 5¼.

Range. Nests from Florida and Texas to Wisconsin and Massachusetts; winters from South Carolina to the tropics.

Washington, common S. R., Apl. 18–Oct. 19. Ossining, common S. R., Apl. 29–Oct. 3. Cambridge, rare S. R., May 8–Sept. 20; formerly common. Glen Ellyn, rare, spring only, May 24–June 5.

An inhabitant of bushy undergrowths whose snappy calls possess almost the character of human speech, so clearly and emphatically are the syllables enunciated. One's presence seems to excite both his curiosity and his disapproval, for he looks one over from this side and that all the while giving expression to remarks which sound far from complimentary. The nest is hung from a crotch, rarely more than 6 feet from the ground. The eggs laid in April, in the South, in May in the North, are white with a few blackish spots.

The Key West Vireo (*V. g. maynardi*) has a longer bill and is somewhat paler below than the White-eye. It is resident in southern Florida and the Keys.

BELL'S VIREO

Vireo belli belli. Case 6, Fig. 65

Smallest of our Vireos; crown ashy, lores and eye-ring whitish. L. 4¼.

Range. Mississippi Valley; nests from Texas to northwestern Indiana and South Dakota; winters in the tropics.

Resembles the White-eye in habits, notes, and choice of haunts, but, according to Goss, its notes are not so harsh and emphatic.

WOOD WARBLERS. FAMILY MNIOTILTIDÆ

BLACK AND WHITE WARBLER

Mniotilta varia. Case 6, Fig. 57

The female is less conspicuously striped than the male, but both are quite unlike any of our other birds. L. 5¼.

Range. Nests from Georgia and Louisiana to Canada; winters from Florida southward.

Washington, abundant T. V., less common S. R., Apl. 8–Oct. 18. Ossining, common S. R., Apl. 18–Oct. 1. Cambridge, very common S. R., Apl. 25–Sept. 5. N. Ohio, common T. V., a few S. R., Apl. 22–Sept. 26. Glen Ellyn, common T. V., Apl. 28–May 28; Aug. 11–Sept. 27. SE. Minn., common T. V., uncommon S. R., Apl. 23–Oct. 12.

This species and the three Nuthatches are our only birds that creep down as well as up; but the Nuthatches wear no body stripes and are otherwise too unlike the Creeper to be confused with him. The Downy Woodpecker 'hitches' himself upward advancing by jerks; the Brown Creeper, true to its name, *creeps*. The nest is built on the ground and the white, brown-marked eggs are laid in April in the South, in May in the North.

PROTHONOTARY WARBLER

Protonotaria citrea. Case 5, Fig. 29

The female is duller than the male, but is too like him to be mistaken for the mate of any other Warbler, while he is in a class by himself. L. 5¼.

Range. Nests from Florida to Delaware and southeastern Minnesota; winters in the tropics.

Washington, of irregular occurrence in May. N. Ohio, one record, May 9. Glen Ellyn, rare, spring only, May 13–15. SE. Minn., common S. R., of Mississippi bottoms, May 7–Aug. 16.

No description or illustration prepares one for the gleaming beauty of the Golden Swamp Warbler. Cypress swamps or willow-bordered sloughs, where it may nest in the opening in old stubs, are its chosen haunts, and in such places it is sometimes found in numbers. The white eggs, thickly marked with brown, are laid in May.

SWAINSON'S WARBLER

Helinaia swainsoni. Case 5, Fig. 28

No wing-bars, plain brown above, white below. L. 5.

Range. In summer from Florida and Louisiana north to southern Illinois and southeastern Virginia; winters in the tropics.

Comparatively few bird students have seen this retiring Warbler in its haunts. "Water, tangled thickets, patches of cane, and a rank growth of semi-aquatic plants," Brewster states, seem indispensable to its existence. Its song in general effect, the same writer says, recalls that of the Northern Water-Thrush. The nest is built in bushes, canes, etc., and the white eggs are laid in May.

WORM-EATING WARBLER

Helmitheros vermivorus. Case 7, Fig 31

Head striped with black and buff; body unstreaked, no wing-bars. L. 5¼.

Range. Nests from South Carolina and Missouri to Connecticut and Iowa; winters in the tropics.

Washington, quite common S. R., Apl. 28–Sept. 15. Ossining, common S. R., May 7–Aug. 23. Cambridge, A. V., one instance, Sept.

Comparatively few bird students can claim close acquaintance with this slow-moving, dull-colored bird who lives on or near the ground, usually in dry woodlands. Its song, resembling that of the Chipping Sparrow, will attract only an attentive ear, while its local distribution further prevents it from being more commonly known. It nests on the ground, the white, brown-marked eggs being laid in May.

BACHMAN'S WARBLER

Vermivora bachmani. Case 5, Figs. 20, 21

All but the central pair of feathers with white spots near the end; no wing-bars; size small, the bill sharply pointed and slightly decurved. L. 4½.

Range. In summer known from Virginia, North Carolina, South Carolina, Kentucky, Arkansas and Missouri; in winter recorded only from Cuba.

When migrating, this little-known species associates with other bird travelers and may be found high or low. When nesting, it frequents swampy woods and, although it usually sings from the tree-tops, it builds in bushes within a few feet of the ground, laying 3–4 white eggs in the latter half of April or in May. Its song has been compared to that of both the Parula Warbler and the Chipping Sparrow.

BLUE-WINGED WARBLER

Vermivora pinus. Case 7, Fig. 35

Outer tail-feathers white near the end; two white wing-bars; female duller than the male.

Range. Nests from Missouri and Virginia north to Minnesota and Connecticut; winters in the tropics.

Washington, rather uncommon T. V., Apl. 26–May 22; Aug. 13–Sept. 2; a few breed. Ossining, common S. R., May 4–Sept. 7. N. Ohio, common S. R., Apl. 27–Sept. 15. Glen Ellyn, irregular,

possibly S. R., May 1–Sept. 15. SE. Minn., uncommon S. R., Apl. 30–Sept. 1.

In second growths, among birches, and at the border of the woods one may hear the wheezy, lazy, *swee-chee* of the Blue-wing. I make it a rule to see the singer always with the hope that he may prove to be the rare Brewster's Warbler, which usually sings like the Blue-wing, but in color is nearer the Golden-wing, being, in fact, like the Golden-wing but with the underparts and cheeks white unmarked with black. It appears to be a hybrid between the Blue-wing and Golden-wing. (Case 7, Fig. 38.)

A much rarer supposed hybrid between these two Warblers is known as Lawrence's Warbler. It is yellow below, like the Blue-wing, but has the black throat and cheeks of the Golden-wing. Some individuals sing like the Blue-wing, others like the Golden-wing, and this is true also of Brewster's Warbler. (Case 7, Fig. 37.)

The Blue-wing nests on the ground, laying 4–5 white delicately speckled eggs the latter part of May.

GOLDEN-WINGED WARBLER

Vermivora chrysoptera. Case 7, Figs. 34, 36

A gray bird with a yellow patch on the wings and a black or blackish breast.

Range. Nests from northern New Jersey and southern Iowa north to Massachusetts and central Minnesota and south in the mountains to northern Georgia; winters in the tropics.

Washington, uncommon, T. V., May 1–30; Aug. 8–21. Ossining, rare S. R., May 8–Aug. 25. Cambridge, rather common S. R., May 12–Aug. 25. N. Ohio, rare T. V., Glen Ellyn, irregular, not common T. V., May 4–18; Aug. 16–Sept. 24. SE. Minn., common S. R., May 5–Sept. 9.

The Golden-wing's *zee-zee-zee-zee* resembles the Blue-wing's song in tone but the syllables are all on one note. When nesting, the Golden-wing prefers second growths, and birches, but when migrating it may be found in the

woods with others of its family. The nest is made on the ground, and the eggs, which resemble those of the Blue-wing, but are more heavily marked, are laid in May or early June.

NASHVILLE WARBLER

Vermivora rubricapilla rubricapilla. Case 7, Fig. 33

No wing-bars or white in the tail; adult with a partly concealed chestnut patch in the gray crown; eye-ring white. L. 4¾.

Range. Nests from northern Pennsylvania and Nebraska to Canada; winters in the tropics.

Washington, uncommon T. V., Apl. 28–May 19; Sept. 5–Oct. 2. Ossining, tolerably common T. V., May 7–27; Aug. 11–Oct. 4; may breed. Cambridge, rather common S. R., May 5–Sept. 15; abundant T. V. N. Ohio, common T. V., Apl. 28–May 27; Sept. 1–Oct. 16. Glen Ellyn, regular T. V., Apl. 27–May 25; Aug. 20–Oct. 19. SE. Minn., common S. R., May 1–Sept. 29.

Thayer in "Warblers of North America" says that the Nashville is one of the most agile and restless of the gleaning Warblers. It prefers birches, but is found in rather open growths of other trees. Its commoner song consists of a string of six or eight or more lively rapid notes, running into a rolling twitter. It has also a flight-song.

The nest is placed on the ground; the eggs, which are laid in May or early June, are white, spotted with reddish brown.

ORANGE-CROWNED WARBLER

Vermivora celata celata. Case 7, Fig. 32

A dusky, olive-green bird, obscurely streaked below; without wing-bars or white patches in tail. L. 5.

Range. Chiefly the interior, nests from Manitoba northward; winters in Florida and the Gulf States.

Washington, casual T. V., two records, Oct. Ossining, A. V. Cambridge, rare T. V., in fall, Oct. 5–Nov. 15. N. Ohio, rare T. V., Apl. 27–May 21. Glen Ellyn, not common T. V., May 1–

21; July 28–Oct. 7. SE. Minn., common T. V., Apl. 25–; Aug. 18–Oct. 16.

The Orange-crown is a rare fall migrant in the North Atlantic States, but common in Florida and southern Georgia in the winter. It frequents the upper branches of trees though, as with most members of its genus, it nests on the ground. Its call-note is a sharp, characteristic *chip*; its song is said to resemble that of the Chipping Sparrow.

TENNESSEE WARBLER

Vermivora peregrina. Case 8, *Fig.* 64

Adult male in spring with a grayish blue crown and white underparts; female and young bright olive-green above, yellowish below; no wing-bars. L. 5.

Range. Nests from northern New England northward; winters in the tropics.

Washington, T. V., rare in May; occasionally common, Aug. 31–Nov. 30. Ossining, rare T. V., May 22–27; Aug. 22–Oct. 2. Cambridge, rare T. V., May 15–25; Sept. N. Ohio, common T. V., May 4–25; Sept. 10–Oct. 10. Glen Ellyn, common T. V., Apl. 30–June 6; July 29–Oct. 9. SE. Minn., common T. V., Apl. 30–; Sept. 30–.

A dull-colored little Warbler which we know as a rather rare migrant, associated with the traveling companies of its family on their northward and southward journeys. The song is described by Mrs. Farwell as noticeable but not musical and resembling that of the Chipping Sparrow.

NORTHERN PARULA WARBLER

Compsothlypis americana usneæ. Case 7, *Fig.* 39

A small, bluish Warbler with a yellow patch on the back, a dark band on the breast, and white wing-bars. L. 4¼.

Range. Nests from Virginia and Louisiana to Canada; winters in the tropics.

Washington, T. V., but dates not distinguishable from those of *americana*. Ossining, common T. V., May 2–28; Sept. 21–Oct. 7. Cambridge, common T. V., May 1–28; Sept. 10–30. N. Ohio, not common T. V., May 1–18. Glen Ellyn, not com-

mon T. V., May 3–28; Aug. 25–Oct. 1. SE. Minn., common T. V., May 5–Sept. 9.

A common migrant, traveling with other Wood Warblers, but in summer usually restricted to swampy localities where usnea moss flourishes. Of, or rather *in* this, it makes its nest, laying 4–5 white, brown-marked eggs the latter half of May. To describe its song as several wheezy notes running into a little trill, conveys no idea of pleasing character. It is easily recognized and, in time, acquires associations with what, to bird-lovers, is the most delightful season of the year.

The Southern Parula Warbler (*C. a. americana*) is a slightly smaller race with less black about the lores and on the breast in the male. It summers in the Southeastern States north to Virginia, and winters in the tropics. Its habits resemble those of the northern race, but it nests in the hanging, gray tillandsia or Spanish 'moss' instead of in usnea.

CAPE MAY WARBLER

Dendroica tigrina. Case 8, *Figs.* 65, 66

Male with chestnut cheek-patches and a white patch on the wing; female and young streaked below, the rump more yellow than the back; tail-feathers with terminal spots. L. 5.

Range. Nests from northern New England northward; winters in the tropics.

Washington, sometimes very common, usually uncommon T. V., May 1–20; Aug. 4–Oct. 17. Ossining, tolerably common T. V., Aug. 20–Oct. 1. Cambridge, rare T. V., May 15–25; Aug. 25. N. Ohio, not common T. V., May 4–18. Glen Ellyn, irregular T. V., Apl. 30–May 21; Sept. 8–15. SE. Minn., common T. V., May 8.

This beautiful Warbler was formerly considered one of our rarer migrants, but of recent years it appears to be increasing in numbers. On its nesting ground the bird is said to frequent the upper branches of tall evergreens (though one of the few nests which has been found was

within three feet of the ground), but when migrating it may be found in the trees of lawns, orchards, and woodland and I have seen it among poke-berries. The Cape May's song is a thin squeak which is compared to the songs of the Black and White and also Black-poll Warblers.

YELLOW WARBLER

Dendroica æstiva æstiva. Case 8, *Figs.* 40, 41

A small yellow bird streaked below with brownish; inner webs of tail-feathers yellow. L. 5.

Range. Nests from Missouri and South Carolina to Canada; winters in the tropics.

Washington, common S. R., abundant T. V., Apl. 4–Sept. 28. Ossining, common S. R., Apl. 30–Sept. 27. Cambridge, abundant S. R., May 1–Sept. 15. N. Ohio, abundant S. R., Apl. 14–Sept. 10. Glen Ellyn, not very common S. R., Apl. 30–Sept. 6. SE. Minn., common S. R., Apl. 28–Sept. 10.

Show me willows over water and any day in May or June I'll show you a Yellow Warbler. Shade and fruit trees also attract him and he may build his cotton-padded nest in their branches or in the shrubbery below. The song is a simple *we-chee, chee, chee, chee, cher-wee*, resembling that of the Chestnut-side, but has its own distinctive tone which permits of ready identification, once it has been learned. The bluish white eggs, thickly marked with shades of brown, are laid the latter half of May.

BLACK-THROATED BLUE WARBLER

Dendroica cærulescens cærulescens. Case 6, *Figs.* 58, 59

The male is unmistakable; the female may be known by the white spot at the base of the outer wing-feathers. L. 5¼.

Range. Nests from northern Connecticut, the mountains of Pennsylvania, and southern Michigan north to Canada; winters in the tropics.

Washington, very common T. V., Apl. 19–May 30; Aug. 4–Oct. 9. Ossining, common T. V., Apl. 25–May 28; Aug. 26–Oct. 10. Cambridge, rather common T. V., May 10–25; Sept. 20–Oct. 10. N. Ohio, common T. V., Apl. 27–May 29; Sept. 5-

Oct. 16. Glen Ellyn, common T. V., Apl. 29–May 29; Aug. 25–Oct. 10. SE. Minn., uncommon T. V., May 11.

A true Wood Warbler, traveling through the trees with the scattered bands of other members of his family as he journeys to and from his summer home. This, in the northern part of his nesting range, is in coniferous forests, in the southern part, deciduous forests. In both, however, the birds require heavy undergrowth in which their bark-covered nest is built within a foot or two of the ground. The grayish white, brown-marked eggs are laid in late May or early June. Miss Paddock in "Warblers of North America" describes the Black-throated Blue's song as "an insect-like buzzing note repeated three or four times with a rising inflection."

Cairn's Warbler (*D. c. cairnsi*) is a nearly related race having, in the male, black centers to the feathers of the back. It nests in the upper parts of the Alleghanies, from Maryland to Georgia, and winters in the West Indies.

MYRTLE WARBLER

Dendroica coronata. Case 5, Fig. 27

The yellow rump is always evident, but in fall and winter the whole plumage is duller, more brownish and the yellow patches at the sides of the breast and in the crown are less conspicuous. A rather large Warbler. L. 5¾.

Range. Nests from northern New England and northern Minnesota to Canada; winters from Kansas and southern New England to the tropics.

Washington, abundant W. V., Aug. 7–May 23. Ossining, common T. V., Apl. 13–May 28; Aug. 16–Nov. 11; a few winter. Cambridge, abundant T. V., Apl. 12–May 20; Sept. 1–Nov. 1; a few winter. N. Ohio, common T. V., Apl. 12–May 20; Sept. 15–Nov. 3. Glen Ellyn, common T. V., Apl. 8–May 28; Sept. 25–Dec. 29. SE. Minn., common T. V., Apl. 6–; Sept. 9–Oct. 28.

A hardy Warbler which, like the Tree Swallow, can substitute bayberries for insects. When the former are available some individuals remain in the North, enduring our winters without apparent discomfort. Its call-note,

tchep, is as distinctive as its markings, and this fact connected with its general distribution and abundance, makes it one of the best known members of this little-known family.

Thayer in "Warblers of North America" describes its common song as "a loud silvery 'sleigh-bell' trill, a vivid, sprightly utterance."

It nests in coniferous forests, building from four to twenty feet from the ground and laying 3–5 white eggs marked with shades of brown, in late May or early June.

MAGNOLIA WARBLER

Dendroica magnolia. Case 8, Fig. 42

The female is duller than the male, but both have the crown gray, a white stripe behind the eye, a yellow rump and the white tail-patches near the middle of the tail, making the tail, when seen from below, appear white, broadly banded with black. L. 5.

Range. Nests from northern Massachusetts and northern Michigan, and in the Alleghanies, from West Virginia to Canada; winters in the tropics.

Washington, common T. V., Apl. 22–May 30; Aug. 15–Oct. 6. Ossining, common T. V., May 9–28; Aug. 13–Oct. 11. Cambridge, T. V., rather common, May 12–25; not uncommon, Sept. 10–25. N. Ohio, common T. V., Apl. 28–May 27; Sept. 1–Oct. 10. Glen Ellyn, common T. V., May 3–June 5; Aug. 12–Oct. 9. SE. Minn., common T. V., May 6–; Aug. 12–Sept. 9.

A common migrant distinguished by the beauty of his costume even in this family of gayly clad birds. When traveling, the Magnolia may be found in woods and woody growth of varied character, but when nesting, it shows a fondness for spruce forests, building in small spruces usually within six feet of the ground.

The Magnolia's song resembles the Yellow Warbler's in tone. Thayer in "Warblers of North America" describes it as "peculiar and easily remembered; *weeto: weeto-weeeéte-eet*, or *witchi, witchi, witchi tit*, the first four notes deliberate and even and comparatively low in tone,

the last three hurried and higher pitched, with decided emphasis on the antepenult *weet* or *witch*."

The eggs, laid in the first half of June, are white marked with brown.

CERULEAN WARBLER

Dendroica rara. Case 8, *Figs.* 46, 47

The adult male will be recognized at sight, but the female and young must be looked at sharply. The whitish or yellowish line over the eye, in connection with the white wing-bars make a fair field-mark. L. 4½.

Range. Nests from Texas and Alabama to Minnesota and western New York; locally from North Carolina to Delaware.

Washington, several records in May, one in fall. N. Ohio, common S. R., Apl. 29–Sept. 20. Glen Ellyn, not common, local S. R., May 8–Aug. 19. SE. Minn., rare S. R.

A tree-top Warbler of deciduous forests, nesting from 25 to 60 feet above the ground. Its song bears a marked resemblance to that of the Parula and its call-note is said to be like the *tchep* of the Myrtle Warbler. The white eggs, heavily blotched with brown, are laid in May.

CHESTNUT-SIDED WARBLER

Dendroica pensylvanica. Case 8, *Figs.* 43, 44

Adults are distinguished by their chestnut sides, yellow crown and wing-bars, but the young are wholly different, silky white below, yellowish green above. L. 5¼.

Range. Nests from northern New Jersey and, in the Alleghanies, South Carolina, north to Canada; winters in the tropics.

Washington, abundant T. V., Apl. 19–May 30; Aug. 10–Oct. 14. Ossining, tolerably common S. R., May 2–Sept. 24. Cambridge, abundant S. R., May 5–Sept. 10. N. Ohio, T. V., May 2–25. Glen Ellyn, rare S. R., common T. V., May 1–Sept. 26. SE. Minn., common S. R., May 3–Sept. 15.

Scrubby second growths undergrown with bushes, roadside borders of trees and bushes, and the brushy margins of woods are all resorts of the Chestnut-side. Here he attracts our attention by his rather loud, frequently

uttered song, which strongly suggests that of the Yellow Warbler. The nest is built within a few feet of the ground and the white, brown-marked eggs are laid the latter part of May.

BAY-BREASTED WARBLER

Dendroica castanea. Case 8, *Figs.* 69, 70

The adult male is unmistakable; the female has chestnut on sides and crown, a grayish streaked back and white wing-bars; the young bird in the fall cannot, in the field, be certainly distinguished from the young Blackpoll, but has the underparts tinted with buff instead of with yellow. L. 5¾.

Range. Nests from northern New England into Canada; winters in the tropics.

Washington, sometimes abundant, usually uncommon T. V., May 2–27; Aug. 29–Nov. Ossining, tolerably common T. V., May 14–28; Aug. 5–Sept. 26. Cambridge, rather rare T. V., May 15–25; Sept. 12–28. N. Ohio, common T. V., May 4–23; Sept. 7–Oct. 10. Glen Ellyn, tolerably common; T. V., May 8–June 5; Aug. 13–Oct. 4. SE. Minn., uncommon T. V., May 13–; Aug. 18–Sept. 15.

The Bay-breast is one of the rarer members of its family. Most of us know it only as a migrant passing northward in May and southward in September, when it may be found in woodlands associated with other migrating Warblers. Its song resembles that of the Black and White Warbler. Mrs. Farwell describes it as "a poor, weak, monotonous saw-filing note." The nest has been found in hemlocks 15–20 feet from the ground. The white eggs, finely marked with shades of brown, are laid in June.

BLACK-POLL WARBLER

Dendroica striata. Case 8, *Figs.* 71, 72

In the spring, a black cap, white cheeks and a gray, black-streaked back distinguish the male; a gray, black-streaked back, the female. In the fall, young and old are olive-green, streaked with black above; yellowish white below, and thus closely resembles the young Bay-breast. L. 5½.

Range. Nests from northern New England and northern Michigan into Canada; winters in the tropics.

Washington, abundant T. V., Apl. 28–June 16; Aug. 31–Oct. 20. Ossining, common T. V., May 7–June 6; Aug. 30–Oct. 16. Cambridge, abundant T. V., May 12–June 5; Sept. 8–Oct. 20. N. Ohio, common T. V., May 6–June 2; Sept. 1–Oct. 16. Glen Ellyn, common T. V., May 2–June 8; Aug. 23–Sept. 27. SE. Minn., common T. V., May 8–; Aug. 27.–

Toward the end of the May Warbler 'waves' the Blackpolls come in force. They are excessively fat and, perhaps for this reason, move rather slowly for a Warbler. They are Wood Warblers, but at this season may overflow into the trees of our lawns and orchards. Mrs. Farwell describes the Blackpoll's song as "a succession of hesitating, staccato, unmusical notes varying greatly in volume. The notes separated, not combined in twos, as in the Black and White Warbler's song." When nesting this Warbler frequents stunted spruce forests, placing its nest in these trees a few feet above the ground, and laying 4–5 white, brown-marked eggs the latter part of June.

BLACKBURNIAN WARBLER

Dendroica fusca. Case 8, *Figs.* 67, 68

The orange breast, fiery in the spring male, duller in the female and fall males, is distinctive. L. 5¼.

Range. Nests from Massachusetts (locally) and central Minnesota north to Canada and southward in the Alleghanies to Georgia; winters in the tropics.

Washington, common T. V., Apl. 30–June 3; Aug. 14–Oct. 7. Ossining, common T. V., May 10–29; Aug. 15–Oct. 15. Cambridge, T. V., uncommon, May 12–22; rare, Sept. 15–30. N. Ohio, common T. V., May 4–June 8; Aug. 12–Sept. 22. SE. Minn., common T. V., May 3–; Sept. 4.

The remoteness of their homes prevents us from making the acquaintance of the brilliantly plumaged birds of the tropics, but among them all we will find none more beautiful than this flame-breasted Warbler, which each

spring comes from his tropical winter home almost to our doors. In the summer he seeks the seclusion of coniferous forests and the higher branches of spruce or hemlock. There his nest is made sometimes 80 or more feet above the ground, and in late May or early June the white eggs, spotted, speckled and blotched with brown, are laid. The Blackburnian's song is described by Miss Paddock in "Warblers of North America" as "very shrill and fine, growing even more shrill and wiry as it rises toward the end."

YELLOW-THROATED WARBLER

Dendroica dominica dominica. Case 5, Fig. 18

A gray Warbler with a yellow throat. L. 5¼.
Range. Southeastern States, nesting north to Maryland; wintering from central Florida southward.
Washington, rare S. R., rather common late in July and Aug.; Apl. 19–Sept. 4.

The loud, ringing *ching-ching-ching, chicker, cherwee* of the Yellow-throated Warbler is one of the characteristic bird songs of spring in southern woods. The bird usually sings from the upper branches of tall trees, often cypresses, in Florida, but further north, from pines, where he can be far more easily heard than seen. The nest is placed 30–40 feet from the ground and the white eggs, thickly marked with shades of brown, are laid in April.

The Sycamore Warbler (*D. d. albilora*, Case 5, Fig. 19) is a nearly related race of the Yellow-throat which inhabits the Mississippi Valley nesting as far north as southern Michigan and wintering in the tropics. It differs from the Atlantic coast form in having a smaller bill and no yellow in front of the eye. As its name implies, it favors sycamore trees.

BLACK-THROATED GREEN WARBLER

Dendroica virens virens. Case 6, Fig. 62

The female has a yellow throat and a band of black spots on the breast, but both sexes may be known by the yellow cheeks and the large amount of white in the tail. L. 5.

Range. Nests from Long Island and northern Ohio north to Canada and south in the Alleghanies to Georgia.

Washington, very common T. V., Apl. 22–May 30; Aug. 26–Oct. 21. Ossining, common T. V., Apl. 30–June 3; Sept. 1–Oct. 26; a few breed. Cambridge, abundant S. R., May 1–Oct. 15. N. Ohio, common T. V., Apl. 25–May 24; Sept. 1–Oct. 16; a few breed. Glen Ellyn, common T. V., Apl. 29–June 6; Aug. 22–Oct. 12. SE. Minn., common T. V., uncommon S. R., Apl. 29–Sept. 22.

The quiet little *zee-zee, zee-ee-zee* of the Black-throated Green announces the arrival of the vanguard of true Wood Warblers, which for the succeeding two weeks will pass in countless numbers through our woodlands, still almost leafless. At this time we may find him wherever trees grow, but his real summer home is coniferous forests, especially of hemlocks, in which he often builds his nests 15–20 feet above the ground. The eggs, laid in late May or early June, are white spotted and speckled with brown.

A southern form of this Warbler (*D. v. waynei*) has been described from the vicinity of Charleston, S. C.

KIRTLAND'S WARBLER

Dendroica kirtlandi. Case 8, Fig. 45

A large Warbler, pale yellow below; crown slaty; back brownish streaked with black.

Range. Nests in Oscoda, Crawford and Roscommon Counties, Michigan, winters in the Bahamas; in migration has been found within the area from Minneapolis, Minn., to Toronto, Ont., south to St. Louis, Mo., and Fort Myer, Va., and southeastward.

Washington, one record, Sept. 25, 1887. N. Ohio, rare T. V. May 9 and 11. Glen Ellyn, one record, May 7, 1894. SE. Minn., one record, Minneapolis, May 13.

Kirtland's Warbler has one of the smallest nesting areas of any North American bird and consequently is one of our rarest species. In the summer it lives among the jack-pines of north central Michigan, nesting on the ground beneath them. When migrating, it may be found usually near the ground, where it may be identified by its habit of tail-wagging. Its song is described by Wood in "Warblers of North America" as belonging to the whistling type with the clear, ringing quality of the Oriole's. The 3–5 eggs, laid early in June, are white speckled with brown in a wreath at the larger end.

PINE WARBLER

Dendroica vigorsi vigorsi. *Case* 4, *Fig.* 57; *Case* 6, *Fig.* 60

The male is bright greenish yellow below, sometimes duskily streaked; the female is tinged with brown above, below is soiled whitish, tinged with yellow. L. 5½.

Range. Nests from the Gulf States to Canada; winters from southern Illinois and Virginia southward.

Washington, quite uncommon S. R., Mch. 20–Oct. 29, abundant in fall. Ossining, casual. Cambridge, locally common S. R., Apl. 10–Oct. 20; occasional W. V. N. Ohio, rare T. V., Apl. 29–May 15. Glen Ellyn, not common T. V., spring records only, Apl. 17–May 24. SE. Minn., common T. V., Apl. 26–.

Pine Warblers seem almost as much a part of pine woods as the trees themselves. They feed on the ground below the pines, they glean from the bark of the trunk, or from the clusters of 'needles' on the topmost boughs, the very peace of the pines is expressed in their calm, even, musical trill; and where there are no pines there are no Pine Warblers. During the migration, it is true, they may be found elsewhere, but at that season they are travelers, and travelers cannot always be responsible for their surroundings. Their nest, of course, is always built in pines, usually from 30–50 feet above the ground. The eggs laid in March in the South, and early June in the North, are white wreathed with brown at the larger end.

YELLOW PALM WARBLER

Dendroica palmarum hypochrysea. *Case* 6, *Fig.* 61

Underparts bright yellow streaked with reddish brown; cap reddish brown; line over the eye yellow. L. 5¼.

Range. Nests from Maine northward; winters from North Carolina to the Florida Keys; west to Louisiana.

Washington, T. V., common, Mch. 31–Apl. 29; Sept. 4–Oct. 28. Ossining, tolerably common T. V., Apl. 11–May 5; Sept. 20–Nov. 8. Cambridge, usually common, sometimes abundant, T. V., Apl. 15–May 5; Oct. 1–15.

A tail-wagging Warbler that frequents bushy places, weedy fields and open pine woods and gardens, living near the ground where it may be easily seen. Its call-note, *chip*, is distinctive and one learns in time to recognize it. Its song is a trill, clear and sweet, but by no means loud.

The Palm Warbler (*D. p. palmarum*) is the Mississippi Valley form of the Atlantic coast race, from which it differs in having the line over the eye white instead of yellow; the yellow of the underparts paler and confined to the throat and breast. It is not infrequent during the fall migration in the North Atlantic States and, in Florida, is far more common than the Yellow Palm.

Washington, rare T. V., Apl. 22–May 18; Sept. 18–Oct. 11. Ossining, T. V., Apl. 29; Sept. 30–Oct. 12. Cambridge, uncommon T. V. in fall, Sept. 15–Oct. 10. N. Ohio, tolerably common T. V., Apl. 24–May 20; Sept. 10–Oct. 16. Glen Ellyn, common T. V., Apl. 23–May 19; Sept. 4–Oct. 18. SE. Minn., common T. V., Apl. 23; Sept. 17–Oct. 3.

Both races nest on the ground.

PRAIRIE WARBLER

Dendroica discolor. *Case* 8, *Fig.* 48

A small Warbler with a reddish brown patch in the back, yellowish wing-bars, and much white in the tail. L. 4¾.

Range. Nests from Florida and northern Mississippi to Michigan and New Hampshire.

Washington, very common S. R., Apl. 12–Sept. 20. Ossining, rare S. R., May 2–Sept. 14. Cambridge, locally common S. R., May 8–Sept. 15. N. Ohio, rare, Apl. 29, May 9, and 14.

Scrubby second growths, hillsides with scattered cedars and barberries, and, sometimes, bushy places in the pines are the haunts of the miscalled Prairie Warbler. Common and generally distributed in the South, it is local in the North and not always found in districts which seem to supply all its wants. Its song is composed of six or seven minute *zees*, the next to the last one usually the highest. The nest is generally built within 4 feet of the ground, the eggs, laid in May, are white marked with shades of brown, often wreathed about the larger end.

OVEN-BIRD

Seiurus aurocapillus. Case 6, Fig. 64

An olive brownish bird, white streaked with black below, with an orange, black-bordered crown and no white on wings or in tail. L. 6¼.

Range. Nests from Georgia and Missouri to Canada; winters from Florida southward.

Washington, very common S. R., Apl. 10–Oct. 17. Ossining, common S. R., Apl. 27–Oct. 10. Cambridge, very common S. R., May 6–Sept. 15. N. Ohio, abundant S. R., Apl. 22–Oct. 1. Glen Ellyn, not common S. R., common T. V., Apl. 28–Sept. 30. SE. Minn., common S. R., Apl. 27–Sept. 22.

The Oven-bird, and its near relatives the Water-Thrushes, bear so little resemblance in color and habits to the true Wood Warblers, that one might well think they were members of another family. Their plumage lacks the bright colors, white wing-bars and tail-patches possessed by most Warblers, and, instead of hopping and flitting from twig to twig, they spend their time chiefly *walking* on the ground, where they find their food.

It is not so much its abundance as its song which makes the Oven-bird well known. Years ago Mr. Burroughs wrote it, *teacher, teacher, teacher, teacher, teacher*, and no one has improved on this description. The Oven-bird

also sings an ecstatic warbling on the wing; a thrilling performance. The nest is built on the ground and, like a Dutch oven, is roofed over with the entrance at one side. The eggs, laid in May, are white, marked chiefly at the larger end with brown.

NORTHERN WATER-THRUSH

Seiurus noveboracensis noveboracensis. Case. 8, *Fig.* 56

Underparts white tinged with pale *yellow*, everywhere—*including throat*—streaked with black; no white in tail or wings. L. 6.

Range. Nests from northern New England to Canada, south in the mountains, to West Virginia; winters in the tropics.

Washington, common T. V., Apl. 22–June 2; July 21–Oct. 6. Ossining, tolerably common T. V., May 11–21; July 28–Oct. 3. Cambridge, abundant T. V., May 8–June 1; Aug. 10–Oct. 10. N. Ohio, common, T. V., Apl. 26–May 25; Sept. 1–15.

The two Water-Thrushes and the Oven-bird are *walking* Warblers, and the Water-Thrushes, furthermore, are *teeterers*, nervously tipping tail and body with apparently exhaustless energy. When migrating, the Northern Water-Thrush often seeks refuge beneath the shrubbery of our lawns, but when nesting it frequents the borders of streams in deep woods, building its home on the ground or in the roots of an upturned tree. Its call-note is a sharp *chink;* its song a hurried rush of loud musical notes, closing abruptly. The 4–5 eggs, laid in the latter half of May or early June, are white with numerous brown markings chiefly about the larger end.

Grinnell's Water-Thrush (*S. n. notabilis*), a slightly larger and darker form, nests in the Northwest and is casually found as a migrant on the Atlantic coast.

LOUISIANA WATER-THRUSH

Seiurus motacilla. Case 5, *Fig.* 5

Line over eye and underparts white, the latter tinted with *buff* (not with yellow, as in the preceding species); the throat white *unmarked*; no white in wings or tail. L. 6¼.

Range. Nests from Georgia and Texas to southern New England and southeastern Minnesota; winters in the tropics.

Washington, rare S. R., Apl. 2–Sept. 14. Ossining, common S. R., Apl. 9–Aug. 24. N. Ohio, tolerably common S. R., Mch. 28–Sept. 15. SE. Minn., uncommon S. R., Apl. 17–Aug. 26.

A shy spirit of woodland brooks, the Louisiana Water-Thrush resembles the Northern Water-Thrush in habits but is more difficult to see; its call-note is louder, its song, wilder, more ringing. Like the Oven-bird it also has a flight, or 'ecstasy'-song. It nests in a bank or among the roots of a fallen tree, laying 4–6 eggs, white with numerous brown markings, in late April or early May.

KENTUCKY WARBLER

Oporornis formosus. Case 8, *Fig.* 52

A yellow line from the bill around the eye; crown blackish; no white on wings or tail. L. 5½.

Range. Nests from Georgia and Texas to southern Wisconsin and the lower Hudson Valley; winters in the tropics.

Washington, not very uncommon S. R., Apl. 29–Sept. 2. Ossining, common S. R., May 2–Aug. 27. N. Ohio, rare, Apl. 27 and May 12.

Wet woodland with luxuriant undergrowth of bushes, ferns and skunk cabbage are the favorite haunts of this sweet-voiced Warbler, and its nest is usually built among vegetation of this character. Its freely uttered song is a loud, clear two-syllabled whistle, in tone like the voice of the Carolina Wren or Cardinal. Its 4–5 eggs, laid in late May or early June, are white, speckled chiefly about the larger end with shades of brown.

CONNECTICUT WARBLER

Oporornis agilis. Case 8, *Figs.* 77, 78

A complete white eye-ring; male without black on the gray breast. L. 5½.

Range. Nests in the interior from north Michigan to Manitoba; winters in the tropics.

Washington, T. V., very rare in spring, May 24–30; common

from Aug. 28–Oct. 24. Ossining, rare T. V., Aug. 26–Oct. 9. Cambridge, fall T. V., sometimes locally abundant, Sept. 10–30. N. Ohio, tolerably common T. V., May 7–24. Glen Ellyn, fairly common T. V., May 12–June 28; Aug. 14–Sept. 22. SE. Minn., uncommon T. V., June 1.

In the Atlantic Coast States this Warbler is found only as a fall migrant, at times in considerable numbers. It lives on the ground in or at the border of woods usually where there is dense undergrowth, and would easily escape observation were it not for its sharp call-note, *peek*, by which it may be identified. Its song, heard only on its migrations up the Mississippi Valley and on its nesting ground, has been described as resembling that of both the Oven-bird and Maryland Yellow-throat. The only nest recorded was found by Ernest Seton near Carberry, Manitoba, June 21, 1883. It was on the ground and contained 4 eggs, white with a few spots about the larger end.

MOURNING WARBLER

Oporornis philadelphia. *Case* 8, *Figs.* 75, 76

Male without white eye-ring; and with a black breast veiled with gray. L. 5½.

Range. Nests from northern New York and Michigan to Canada, south in the mountains to West Virginia; winters in the tropics.

Washington, very rare T. V., May 6–30; Aug. 17–Oct. 1. Ossining, rare T. V., May 28–29; Aug. 18–Oct. 1. Cambridge, rare T. V., May 22–June 5; Sept. 12–25. N. Ohio, tolerably common T. V., May 5–28. Glen Ellyn, rather rare T. V. May 18–June 8; Aug. 17–. SE. Minn., uncommon T. V., May 13–; Aug. 1–Sept. 10.

The Mourning Warbler is one of the rarer Warblers which, by good fortune, we may occasionally see toward the end of the spring migration. It is usually found in the lower growth, being a brush and tangle haunter of woods and clearings. Its song, which is described as clear and ringing, is uttered frequently, often from a dead

limb. The nest is built in briars or bushes within a foot or two of the ground. The eggs, laid in the first half of June, are white with a few brownish spots at the larger end.

MARYLAND YELLOW-THROAT

Geothlypis trichas trichas. *Case* 8, *Figs.* 50, 51

The gray-bordered, black mask of the male makes him unmistakable. The female is without distinctive markings, but may easily be identified by her notes and actions. L. 5¼.

Range. Nests from Virginia and the lower Mississippi Valley northward; winters from North Carolina to Florida.

Washington, abundant S. R., Apl. 13–Oct. 21. Ossining, common S. R., Apl. 28–Oct. 23. Cambridge, abundant S. R., May 5–Oct. 20; occasional in winter. N. Ohio, abundant S. R., Apl. 25–Sept. 25. Glen Ellyn, common S. R., May 2–Oct. 2. SE. Minn., common S. R.

A fidgety, inquisitive inhabitant of bushy undergrowth along roadsides and wood borders, whose impatient off-repeated call-note, *chack*, *chack*, and energetic song of *wichity*, *wichity*, *wichity*, soon become familiar to the bird-student. It nests on or near the ground and the white, lightly spotted eggs are laid in the latter half of May.

The Florida Yellow-throat (*G. t. ignota*), a more deeply colored race, is found from North Carolina to southern Florida. In the last-named State it usually inhabits scrub palmetto growths.

YELLOW-BREASTED CHAT

Icteria virens virens. *Case* 8, *Fig.* 49

A large bird, superficially, quite unlike the true Warblers but nevertheless agreeing with them in essential structure. L. 7½.

Range. Nests from Texas and northern Florida to southern Minnesota and (locally) Massachusetts; winters in the tropics.

Washington, common S. R., Apl. 16–Sept. 28. Ossining, common S. R., Apl. 28–Aug. 29. Cambridge, rather rare and irregular S. R., May 15–Sept. N. Ohio, common S. R., May 1–

Sept. 15. Glen Ellyn, local, not common, May 10–Aug. 16. SE. Minn., rare S. R. (?).

If the Chat lived in England what a wealth of lore, legend, and literature would owe its origin to his strange ways and stranger notes! Here he is known to few but the initiated, who find an endless interest in his odd song-medley and peculiar antics. Go yourself to the brush-grown, thickety wood borders and clearings he loves and let him be his own interpreter. You may even find his nest low down in some crotch with its white, evenly speckled eggs, and hear his angry *chŭt* as he resents your presence.

HOODED WARBLER

Wilsonia citrina. Case 8, *Figs.* 54, 55

The yellow face and black 'hood' distinguishes the male, but both sexes may be known by the large amount of white in the outer tail-feathers. L. 5¾.

Range. Nests from Georgia and Louisiana north to Michigan and Connecticut; winters in the tropics.

Washington, locally common, S. R., Apl. 19–Oct. 1. Ossining, rare S. R., to Sept. 1. N. Ohio, rare, May 8, 9, 12 and 22.

Color, song, habit and temperament combine to make the Hooded Warbler one of the most attractive members of its family. As one sees it flitting from bush to bush in woodland undergrowth, displaying its white outer tail-feathers as it flies, pausing now and again to utter its simple, sweet whistled song, one is impressed not only by its beauty but by its gentleness. It nests in a bush within a foot or two of the ground, laying 3–5 white eggs, wreathed with shades of brown spots, early in May, in the South, in June, in the North.

WILSON'S WARBLER

Wilsonia pusilla pusilla. Case 8, *Figs.* 73, 74

The female usually lacks the black cap, when she resembles the female Hooded, but is smaller and has no white in the tail. L. 5.

Range. Nests from northern New England and northern Minnesota northward; winters in the tropics.
Washington, rather common T. V., May 1–26; Aug. 27–Oct. 6. Ossining, tolerably common T. V., May 9–30; Aug. 10–Sept. 9. Cambridge, common T. V., May 12–25; uncommon, Sept. 5–20. N. Ohio, tolerably common T. V., May 5–June 2; Sept. 5–15. Glen Ellyn, not common T. V., May 7–June 26; Aug. 16–Sept. 21. SE. Minn., common T. V., May 2–; Aug. 23–Sept. 27.

Wilson's Warbler, a flycatching Warbler of the lower growth, favors bushes near water, but is also found in dryer places. Thayer in "Warblers of North America" says that its "song has much of the ringing clarity of the Canada's and Hooded's songs." It nests on the ground, laying 4 eggs, usually with a wreath of spots at the larger end, early in June.

CANADIAN WARBLER

Wilsonia canadensis. Case 8, Fig. 53

Above gray, no white in wings or tail; breast with a necklace of black spots, paler and less numerous in the female. L. 5½.
Range. Nests from Massachusetts and central Minnesota northward, south in the mountains to Tennesee; winters in the tropics.
Washington, very common T. V., May 5–June 2; July 31–Sept. 25. Ossining, common T. V., May 6–June 2; Aug. 10–Oct. 11. Cambridge, common, May 12–30, rare, Sept. 1–15; rare S. R. N. Ohio, common T. V., Apl. 28–May 27; Sept. 1–18. Glen Ellyn, common T. V., May 5–June 6; Aug. 15–Sept. 22. SE. Minn., common T. V., May 8–; Aug. 18–Sept. 5.

The Canadian Warbler haunts the lower growth of deciduous forests. It is "a sprightly, wide-awake, fly-snapping Warbler, vivid in movement and in song" (Thayer). "The song is liquid, uncertain, varied, bright and sweet" (Farwell). It nests on the ground early in June, laying 4–5 eggs much like those of Wilson's Warbler.

REDSTART

Setophaga ruticilla. Case 8, Figs. 57, 58

The female is yellow where the male is flame-color; young males resemble the female, but usually have more or less black on the breast. L. 5½.

Range. Nests from Arkansas and North Carolina to Canada; winters in the tropics.

Washington, very abundant T. V., Apl. 15–May; Aug. 19–Sept. 30; a few breed. Ossining, common S. R., May 1–Oct. 3. Cambridge, abundant S. R., May 5–Sept. 20. N. Ohio, common S. R., Apl. 27–Sept. 20. Glen Ellyn, not common S. R., common T. V., May 3–Oct. 5. SE. Minn., common S. R., May 2–Sept. 22.

His bright colors, graceful, aërial pirouetting, abundance, and frequently uttered song make the Redstart the most conspicuous as well as one of the most attractive of our woodland Warblers. So exquisite a creature should be as widely known as are violets or daisies. The Redstart builds its well-made nest in a crotch, usually about fifteen feet above the ground. The 4–5 grayish white eggs, spotted and blotched chiefly at the larger end, are laid in mid-May.

WAGTAILS AND PIPITS. FAMILY MOTACILLIDÆ

AMERICAN PIPIT

Anthus rubescens. *Case* 4, *Fig.* 62; *Case* 5, *Fig.* 17

Outer tail-feathers white, bill slender, back grayish. L. 6¼.

Range. Nests from Newfoundland to Greenland; winters from Maryland to Florida and Mexico.

Washington, W. V., sometimes abundant, Oct. 2–May 12. Ossining, common T. V., Mch. 26–(?); Sept. 24–Nov. 16. Cambridge, T. V., abundant Sept. 20–Nov. 10; rare Apl. 10–May 20. N. Ohio, common T. V., Apl. 6–May 20; Oct. 19. Glen Ellyn, not common T. V., Apl. 15–; Sept. 30–Oct. 18. SE. Minn, common T. V., May 4–; Oct.

At first glance a Pipit might be mistaken for a Sparrow—let us say, a Vesper Sparrow; but note that it walks, instead of hops, that it constantly wags or 'tips' its tail, that it has a slender, not stout bill. Meadows, pastures, plowed fields, golf-courses, are frequented by Pipits, usually in flocks of a dozen or more. When flushed, with

a faint *dee-dee*, they bound lightly into the air but usually soon return to earth.

Sprague's Pipit (*Anthus spraguei*), a slightly smaller species, nests in Montana, Dakota, and northward, and is sometimes found in small numbers on the coast of South Carolina and Georgia in winter.

THRASHERS, MOCKINGBIRDS, ETC. FAMILY MIMIDÆ

MOCKINGBIRD

Mimus polyglottos polyglottos. *Case* 4; *Fig.* 76

To be confused in color only with the Loggerhead Shrike, but larger, with a longer tail, no black on the face and totally different habits. L. 10½.

Range. Nests from the Gulf to Iowa and Maryland; rarely to Massachusetts; winters from Maryland southward.

Washington, uncommon P. R., less numerous in winter. Cambridge, rare S. R., Mch. to Nov.

No southern garden is complete without a Mockingbird to guard its treasures with his harsh alarm-note and extol its beauties in his brilliant, varied song. He is to the South what the Robin is to the North—and more, for he is present throughout the year while the Robin is with us only during the nesting season.

The Mocker builds in bushes, orange-trees or other dense vegetation, from late March, in southern Florida, to early May in Virginia. The 4–6 eggs are blue heavily marked with brown.

CATBIRD

Dumatella carolinensis. *Case* 4, *Fig.* 81; *Case* 6, *Fig.* 71

Both sexes of the Catbird wear the same costume at all seasons and all ages. L. 9.

Range. Nests from Florida and Texas to Canada; winters from South Carolina to the tropics.

Washington, abundant S. R., Apl. 24–Oct. 11; occasionally winters. Ossining, common S. R., Apl. 28–Oct. 25. Cambridge, abundant S. R., May 6–Oct. 1; occasional in winter. N. Ohio, common S. R., Apl. 21–Oct. 5. Glen Ellyn, common S. R., Apl. 29–Oct. 6. SE. Minn., common S. R., Apl. 30–Oct. 6.

If the Catbird's name were based on his song instead of on his call-note, he might have won the popularity he deserves, but which seems forever denied him. Taking kindly to civilization he makes his home near ours, asking only the shelter of our shrubbery and a share of our small fruits in return for three months of music such as but few birds can produce.

The Catbird nests in bushes and thickets laying 3–5 greenish blue eggs in May.

BROWN THRASHER

Toxostoma rufum. *Case 4, Fig. 82; Case 6, Fig. 72*

Tail and bill much longer than in the Thrushes; white wing-bars; eye pale yellow. L. 11½.

Range. Nests from Florida and Louisiana to Canada; winters from North Carolina and SE. Missouri to Florida and Texas.

Washington, very common S. R., Apl. 8–Oct.; occasionally winters. Ossining, common S. R., Apl. 22–Oct. 28. Cambridge common S. R., Apl. 26–Oct. 20. N. Ohio, common S. R., Apl. 6–Oct. 15. Glen Ellyn, common S. R., Apl. 9–Oct. 11. SE. Minn., common S. R., Apl. 15–Oct. 7.

In the wealth of new experiences and awakened associations which crowd the bird-lover's days in April and May, none stands out more clearly in my memory than the first Thrasher's song.

The rich, distinctly enunciated notes ring loud and clear above all other songs as the bird from some tree-top gives his musical message to the world. The performance concluded he returns to the undergrowth whence one may hear his explosive, whistled *whèu* or sharp kissing note. The nest is built in bushy growths or on the ground in May. The 3–6 eggs are grayish white finely speckled with reddish brown.

WRENS. FAMILY TROGLODYTIDÆ

CAROLINA WREN

Thryothorus ludovicianus ludovicianus. Case 4, Fig. 64

Largest and most brightly colored of our Wrens. Note the buff or whitish line over the eye. L. 5½.

Range. Gulf States north to Connecticut and Iowa; non-migratory. The Florida Wren (*T. l. miamensis*) a slightly larger, more richly colored form, inhabits Florida from Palatka southward.

Washington, common P. R. Cambridge, rare or casual. N. Ohio, tolerably common P. R.

The Carolina Wren is a bird of the woods, whose loud, musical whistles are among the most conspicuous of southern bird notes. They suggest those of both the Cardinal and Tufted Titmouse, but are more varied in character. A common scolding call is recognizably wren-like, while another suggests a tree-toad's *krrring*. The nest is built in holes, in April. The 4–6 eggs are white with numerous reddish brown and lavender markings.

BEWICK'S WREN

Thryomanes bewicki bewicki

Size of the House Wren, but with the tail nearly half an inch longer; its outer feathers tipped with gray.

Range. Mississippi Valley from the Gulf States to southern Michigan; rare east of the Alleghanies.

Washington, rare and local T. V., Mch. 26–July–; may winter, Nov. 24–Dec. 22.

A house Wren of the States west of the Alleghanies with a tail that seems to be at the mercy of passing breezes, and a song resembling the Song Sparrow's, but louder. Its nesting habits resemble those of the House Wren. The 4–6 eggs, laid in April, are white speckled with reddish brown and lavender.

HOUSE WREN

Troglodytes aëdon aëdon. *Case 4, Fig. 63; Case 6, Fig. 70*

No introduction is needed to this feathered tenant of many bird-lovers. L. 5.

Range. Nests from Virginia and Kentucky to Canada; winters from South Carolina and lower Mississippi Valley to Mexico.

Washington, common S. R., Apl. 13–Oct. 11. Ossining, common S. R., Apl. 23–Oct. 14. Cambridge, formerly abundant S. R., Apl. 28–Sept. 25; now rare and local. N. Ohio, common S. R., Apl. 17–Oct. 5. Glen Ellyn, S. R. in isolated pairs; Apl. 26–Oct. 13. SE. Minn., common S. R., Apl. 27–Sept. 18.

The familiar inhabitant of our bird-houses whose numbers seem limited only by the nesting-sites we offer him. His little fountain of melody bubbles forth irrepressibly to cheer his mate or challenge a rival. With the exhaustless energy of their kind they fill their nest-box with twigs, grasses and feathers, wherein are laid 6–8 minutely and evenly speckled pinkish eggs.

WINTER WREN

Nannus hiemalis hiemalis. *Case 2, Fig. 58*

Smaller than the House Wren; underparts brownish, flanks and belly finely barred. L. 4.

Range. Nests from northern New England and Central Michigan north to Canada and, in the Alleghanies, south to North Carolina; winters from the Northern States to the Gulf.

Washington, rather common W. V., Aug. 10–May 1. Ossining, tolerably common W. V., Sept. 18–Apl. 27. Cambridge, T. V. uncommon, Sept. 20–Nov. 25; rare, Apl. 10–25; a very few winter. N. Ohio, tolerably common. W. V., Sept. 14–May 17. Glen Ellyn, fairly common T. V., Apl. 1–May 10; Sept. 9–Nov. 7. SE. Minn., common T. V., rare W. V., Sept. 22–Apl. 3.

The Winter Wren comes to us from the North when the House Wren leaves for the South and remains with us until the House Wren returns in the spring. But one by no means takes the place of the other. The Winter Wren is a wood Wren that lives in fallen tree-tops, old

brush-piles or similar retreats, and his nervous *chimp, chimp*, as with cocked-up tail he hops into view for a second, is like the call of the Song Sparrow rather than the scolding note of most Wrens; nor does his rippling, trickling song resemble the House Wren's sudden outburst.

The nest is built in the roots of a tree or similar location. The 5–7 eggs, laid in early June, are white, finely, but rather sparingly speckled with brownish.

SHORT-BILLED MARSH WREN

Cistothorus stellaris. Case 8, *Fig.* 80

Smallest of our Wrens; the head and back streaked with white. L. 4.

Range. Nests from central Missouri and northern Delaware to Saskatchewan and southern Maine; winters from southern Illinois and southern New Jersey to the Gulf.

Washington, very rare T. V., two instances, May. Ossining, rare S. R., to Oct. 16. Cambridge, formerly locally common S. R., May 12–Sept. 25; now chiefly T. V. N. Ohio, rare, May 12, 14, 16 and 19. Glen Ellyn, fairly common S. R., May 8–Oct. 17. SE. Minn., common S. R., May 13–Sept. 19.

Although we have only six species of Wrens in the eastern United States, they are so unlike in their choice of haunts that few localities which will afford them the hiding places they all love are without one or more of them. The House and Bewick's Wrens make their homes near ours; the Carolina and Winter Wrens prefer the woods; the Long-billed Marsh Wren's haunts have given him his name, and if we should call the present species Meadow Wren, its home would be similarly indicated, for it lives in wet, grassy places rather than among the cat-tails.

Ernest Seton describes its note as resembling the sound produced by striking two pebbles together, while its song is a series of *chaps*, running into *chap-r-r-rrr*. The globular nest is built on the ground, and the 6–8 eggs, laid in May, are usually pure white.

LONG-BILLED MARSH WREN

Telmatodytes palustris palustris. Case 8, Fig. 79

Darker and larger than the Short-billed Marsh Wren, with a blackish brown crown and white stripe over the eye. L. 5¼.

Range. Nests from Virginia to Canada; winters from southern New Jersey to South Carolina. Worthington's Marsh Wren (*T. p. griseus*) is the form of the Atlantic coast from South Carolina to Florida. Marian's Marsh Wren (*T. p. marianæ*) is found on the more southern Atlantic coast and on the Gulf coast of Florida; while the Prairie Marsh Wren (*T. p. iliacus*) nests in the Mississippi Valley east to Indiana north to Canada, and winters along the Gulf coast. Where two races may be expected to occur together (for example, in the South, during the winter) field identification of the various races may be left to experts and the average observer must be content with plain "Marsh Wren."

Washington, very numerous S. R., Apl. 15–Nov. 1. Ossining, common S. R., May 10–Oct. 28. Cambridge, locally abundant S. R., May 15–Oct. 1; sometimes a few winter. N. Ohio, common S. R., Apl. 21–Sept. 20. Glen Ellyn, fairly common S. R., May 16–Oct. 10. SE. Minn., common S. R., May 5–Sept. 9.

As well look for pond lilies on a rocky hillside as a Marsh Wren outside a marsh. Give him cat-tails for cover and to support his bulky nest and he is at home. His scolding notes betray his ancestry and his reeling, rippling song, delivered both from a perch and on fluttering wings above the reeds, suggests in form, at least, that of the House Wren. The 5–9 eggs, laid in early June are uniform chocolate or thickly marked with brown.

CREEPERS. FAMILY CERTHIIDÆ

BROWN CREEPER

Certhia familiaris americana. Case 2, Fig. 59

Tail-feathers with stiffened points, bill slender and slightly curved. L. 5¾.

Range. Nests from northern New England and south along the Alleghanies to North Carolina; winters south to Florida.

Washington, common W. V., Sept. 22–May 1. Ossining, tolerably common W. V., Sept. 20–May 7. Cambridge, common T. V.,

rather common W. V., Sept. 25–May 1; one summer record N. Ohio, common W. V., Oct. 1–May 9. Glen Ellyn, tolerably common W. V., Sept. 15–May 19. SE. Minn., common T. V., uncommon W. V., Sept. 25–Mch. 30.

To see the Brown Creeper is to know him but so inconspicuous is he that unless you chance to observe him drop from one to tree near the foot of another, you may overlook the little figure creeping spirally upward. Nor are his thin, weak, squeaky call-notes more likely to attract attention than he is himself. A true bird of the bark, he not only hunts upon it but builds his nest behind it, laying 5–8 white, brown-spotted eggs in May.

NUTHATCHES. FAMILY SITTIDÆ

WHITE-BREASTED NUTHATCH

Sitta carolinensis carolinensis. Case 2, *Figs.* 38, 39; *Case* 4, *Fig.* 65

Crown black, cheeks white; breast white; the female with a gray crown. L. 6.

Range. Nests from Gulf States to Canada; a Permanent Resident. The Florida White-breasted Nuthatch (*S. c. atkinsi*) a slightly smaller form in which the female as well as the male has the crown black, is the race inhabiting Florida, the Atlantic coast to South Carolina and the Gulf coast to Mississippi.

Washington, common T. V. and W. V., less common S. R. Ossining, common P. R. Cambridge, P. R., rare in summer, uncommon in winter, common in migrations; most numerous in Oct. and Nov. N. Ohio, common P. R. Glen Ellyn, fairly common P. R. SE. Minn., common P. R.

During the summer we will see comparatively little of this bird who, with equal ease, climbs either down or up a tree trunk, but in the winter he will be a constant patron of the nuts and suet on our lunch counters. Habit, markings, his unmistakable *yank-yank*, all distinguish him from our other birds, except his Canadian cousin to which, after all, he bears only a family resemblance.

In April, 5–7 white, brown speckled eggs are laid in a hole in a tree, lined with feathers, etc.

RED-BREASTED NUTHATCH

Sitta canadensis. *Case* 2, *Figs.* 60, 61

Underparts brownish, a line through the eye, black in the male, slate in the female. Smaller than the White-breasted Nuthatch. L. 4¾.

Range. Nests from northern New England and northern Minnesota into Canada; south along the Alleghanies to North Carolina; winters from southern Canada to the Gulf States.

Washington, irregularly abundant W. V., sometimes rare, Sept. 15–May 10. Ossining, irregular W. V., Aug. 8–May 8. Cambridge, irregular T. V., and W. V., Aug. 15–Nov. 25; Nov. 25–Apl. 15. N. Ohio, tolerably common W. V., Sept. 4–May 22. Glen Ellyn, irregular T. V., Apl. 24–May 21; Aug. 19–Dec. 12. SE. Minn., common T. V., uncommon W. V., Sept. 24–Apl. 21.

Late in August when I hear a note such as one might imagine a baby Nuthatch would utter, I know that the Red-breasted Nuthatch has arrived from the north perhaps to spend the winter, or, may be, to go farther south. He never seems quite as familiar as his larger, louder-voiced, white-breasted cousin, and if one wants to make his acquaintance it is well to follow the sound of his penny-trumpet-like notes until their author is discovered.

BROWN-HEADED NUTHATCH

Sitta pusilla. *Case* 4, *Fig.* 66

The head is browner than in the figure; the nape has a downy white patch. Smallest of our Nuthatches. L. 4¼.

Range. Nests from Florida to southern Delaware and southern Missouri; a Permanent Resident.

The Brown-headed Nuthatch is a bird of southern pine forests; one may travel for miles without seeing a single individual and then discover a company of a score or more. They pass most of their time among the upper branches uttering a *pit-pit* as they hunt for food, or all suddenly

joining in a metallic *tnee-tnee-tnee*, when they are apt to take flight to the adjoining trees. The nest is in a hole in a tree or stump, generally near the ground; 5–6 white, heavily marked eggs being laid in March.

TITMICE. FAMILY PARIDÆ

TUFTED TITMOUSE

Bæolophus bicolor. Case 4, Fig. 67

A large, gray Titmouse, with a conspicuous crest, black forehead, and reddish brown flanks. L. 6.

Range. Nests from the Gulf States north to New Jersey and Nebraska. Resident, except at the northern limit of its range.

Washington, very common P. R., more so in winter. N. Ohio, common P. R. Glen Ellyn, only two records, Apl. 4 and Nov. 19.

The loud *peto, peto, peto* of the Tufted Tit can be confused only with certain notes of the Carolina Wren, but while skilfull stalking is required to see the Wren, one may walk up and inspect the Tit with little or no caution. When he sees us he may change his call to a hoarse *dee-dee-dee* which at once betrays his relationship to the Chickadee. The nest is made in a hole, and the 5–8 white, brown-marked eggs are laid in April.

BLACK-CAPPED CHICKADEE

Penthestes atricapillus atricapillus. Case 2, Fig. 37

Crown black, wing-coverts margined with whitish. L. 5¼.

Range. Nests from central Missouri and northern New Jersey north into Canada, south, along the Alleghanies to North Carolina; winters south to Maryland.

Washington, rare and irregular W. V., Oct. 19–Apl. 19. Ossining, tolerably common P. R. Cambridge, common P. R., more numerous in fall and winter. N. Ohio, common P. R. Glen Ellyn, fairly common P. R. SE. Minn., common P. R.

While the Chickadee is with us throughout the year, it is during the winter that he takes first place in our affec-

tions. Active, cheerful, friendly, he is an ever welcome visitor to our lunch-counters, and often shows complete and winning confidence in us by perching on our hands. His clearly enunciated *chick-a-dee*, with its variations, we accept as his characteristic language, but the sentiment expressed in his two- or three-noted whistle seems to belong to the Pewee rather than the sprightly Black-cap. It is, in fact, often falsely attributed to that bird, even when our books tell us that the Pewee is wintering in the tropics!

The Chickadee nests in holes, usually within ten feet of the ground, laying 5–9 white, brown-speckled eggs in the first half of May.

CAROLINA CHICKADEE

Penthestes carolinensis carolinensis. Case 4, Fig. 68

Smaller than the Black-cap; without white margins on the wing-coverts. L. 4¾.

Range. Southeastern United States, north to northern New Jersey and central Missouri. The south Florida form (*P. c. impiger*) is slightly smaller and darker.

Washington, very common P. R., particularly in winter.

Whether because of a different temperament or because milder winters make him less dependent on man's bounty, the Carolina Chickadee does not show that unquestioning confidence in our good faith which makes the Black-cap so dear to us.

The *chick-a-dee* note is less clearly and more hurriedly given by the Carolina, and the *pe-wee* whistle is not so loud and usually consists of four notes instead of two. The nesting habits and eggs of the two species are alike, but the southern bird begins to lay in March.

BROWN-CAPPED CHICKADEE

Penthestes hudsonicus

Similar to the Black-cap but crown dark brown; back brownish ashy.

Range. Northern New England and Canada; rarely further south in winter. Represented by three races: the Acadian Brown-capped Chickadee (*P. h. littoralis*) of northern New England, New Brunswick, Nova Scotia and Newfoundland; the Labrador Brown-capped Chickadee (*P. h. nigricans*) of Labrador, and the Hudsonian Brown-capped Chickadee (*P. h. hudsonicus*) of the region west of Hudson Bay.

Until recent years the Brown-capped Chickadee was rarely seen far south of its breeding range, but during several winters it has invaded New England in considerable numbers and has been found in the lower Hudson Valley, Long Island, Staten Island and northern New Jersey. At close range an experienced observer may know it by its dark brown head, while Brewster states that its "nasal, drawling, *tchick, chee-day-day*" at once distinguishes it from the Black-cap. All three races have been reported in these winter migrations and only expert examination of specimens can determine whether the little wanderer is from Labrador, New Brunswick, or the country west of Hudson Bay.

OLD-WORLD WARBLERS, KINGLETS AND GNATCATCHERS. FAMILY SYLVIIDÆ

GOLDEN-CROWNED KINGLET

Regulus satrapa satrapa. *Case 2, Figs. 62, 63; Case 1, Figs. 72, 73*

Very small, olive-green birds with a flame and yellow crown-patch in the male and a yellow crown -patch in the female. L. 4.

Range. Nests from northern New England northward and, in the Alleghanies, south to North Carolina.

Washington, abundant W. V., Sept. 30–Apl. 27. Ossining, common W. V., Sept. 20–Apl. 28. Cambridge, very common

T. V., not uncommon W. V., Sept. 25–Apl. 20. N. Ohio, common W. V., Sept. 26–May 4. Glen Ellyn, common T. V., irregular W. V., Sept. 19–May 8. SE. Minn., common T. V., Mch. 30–; Sept. 21–Dec. 1.

It is surprising, in the depth of winter, when in great coat and muffler we keep warm only by vigorous exercise, to see these dainty, feathered mites, unconcerned by the temperature, flitting here and there in their search for insects' eggs and larvæ. They have small fear of man and we may readily approach near enough to hear their thin *ti-ti* or see their golden-crown. In proportion to its size, this diminutive species lays a larger number of eggs than any other of our birds, as many as 9 or 10 white, brown-marked eggs being laid in their pensile, mossy nest in the latter part of May.

RUBY-CROWNED KINGLET

Regulus calendula calendula. *Case* 4, *Figs.* 70, 71; *Case* 5, *Figs.* 36, 37

A white eye-ring; two whitish wing-bars, no white in the tail; adult male with a ruby crown-patch; absent in females and young. L. 4¼.

Range. Nests chiefly north of the United States; winters from Virginia and Iowa southward.

Washington, abundant T. V., Apl. 12–May 15; Sept. 25–Nov. 1; occasionally winters. Ossining, common T. V., Apl. 8–May 13; Sept. 16–Nov. 3. Cambridge, rather common T. V., Apl. 12–May 5; Oct. 10–30. N. Ohio, common T. V., Apl. 1–May 23; Sept. 9–Nov. 3. Glen Ellyn, fairly common T. V., Mch. 22–May 19; Sept. 9–Oct. 27. SE. Minn., Mch. 12–; Sept. 18–Oct. 24.

A tiny, olive-green bird, with a large white eye-ring, fluttering actively among the yellowing leaves, uttering from time to time a wren-like *cack* as he twitches his wings and showing little or no fear of man can be only the Ruby-crown, southward bound. He returns before the trees are clad, as the author of a song as marvelous in volume as it is musical in tone; a whistled song of rare sweetness.

BLUE-GRAY GNATCATCHER

Polioptila cærulea cærulea. Case 4, Fig. 69

A slender, gray mite with a comparatively long tail of which the central feathers are black, the outer ones white. L. 4½.

Range. Nests from the Gulf States to southern Wisconsin and southern New Jersey; winters from the Gulf States southward.

Washington, rather common S. R., Mch. 30–Nov. 23. N. Ohio, common S. R., Apl. 20–Sept. 15. Glen Ellyn, not common S. R., Apl. 22–Aug. 20; possibly later. SE. Minn., rare S. R.

In color, form, proportions and voice, the Gnatcatcher may properly be called 'dainty.' His slightly explosive call-note *tin-ng*, is louder than his exquisitely finished, varied, miniature song. The nest is almost as fine in workmanship as a Hummer's. The 4–5 white, thickly speckled eggs, are laid in April and early May.

THRUSHES, BLUEBIRDS, ETC. FAMILY TURDIDÆ

WOOD THRUSH

Hylocichla mustelina. Case 6, Fig. 74

Head brighter than tail; underparts *white*, heavily spotted with large, round black dots. Largest of our Thrushes. L. 8¼.

Range. Nests from Florida and Texas north to central Minnesota and southern New Hampshire; winters in the tropics.

Washington, common S. R., Apl. 19–Oct. 10. Ossining, common S. R., Apl. 30–Oct. 2. Cambridge, locally common S. R., May 10–Sept. 15. N. Ohio, common S. R., Apl. 20–Oct. 1. Glen Ellyn, fairly common S. R., Apl. 30–Sept. 29 SE. Minn., common S. R., May 1–Sept. 19.

Most familiar of our Thrushes. From late April to early August his bell-like notes are heard, not only in the forest, but in wood-bordered village streets and from the shade trees of our lawns. His sharp, pebbly, *pit-pit*, is prominent in the chorus of protesting notes which greet

the Screech Owl should he leave his retreat before diurnal birds have gone to bed.

The nest is usually built in small trees about 8 feet from the ground. The 3–5 greenish blue eggs are laid in May. There is a second brood in June.

VEERY

Hylocichla fuscescens fuscescens. *Case* 6, *Fig.* 73

Upperparts, including tail, uniform cinnamon-brown, breast buff with indistinct brownish spots; sides white. L. 7½.

Range. Nests from northern New Jersey and northern Illinois into Canada and south in the Alleghanies to Georgia; winters in the tropics. A closely related western form, the Willow Thrush (*H. f. salicicola*) nests in Minnesota and westward, and migrates through the Mississippi Valley. To the field naturalist it is essentially the Veery.

Washington, common T. V., Apl. 26–June 2. Aug. 18–Sept. 25. Ossining, common S. R., Apl. 29–Sept. 5. Cambridge, locally abundant S. R., May 8–Sept. 5. N. Ohio, common S. R., Apl. 20–Oct. 1. Glen Ellyn, tolerably common T. V., Apl. 24–May 29; Aug. 26–Sept. 3; SE. Minn., common S. R. May 5.

Low, wet woods with considerable undergrowth, where skunk cabbage and hellebore flourish are the home of the Veery. Here he winds his mysterious double-toned spiral song, and here, on the ground, hidden beneath the rank vegetation, he builds his nest. The eggs, laid late in May, resemble those of the Wood Thrush. The Veery's common call is a clearly whistled *wheé-you*, quite unlike the *quirt* or *pit-pit* of the Wood Thrush. Except in mountainous regions and some local 'stations,' the Wood Thrush and Veery are the only Thrushes which nest in the eastern United States south of Massachusetts.

GRAY-CHEEKED THRUSH

Hylocichla aliciæ aliciæ. *Case* 8, *Fig.* 82

Upperparts uniform olive; eye-ring whitish, not buffy as in the Olive-backed Thrush (Case 8, Fig. 81); sides of throat and breast less buffy than in the Olive-back. L. 7½.

Range. Nests north of the United States. Bicknell's Thrush (*H. a. bicknelli*) a slightly smaller, southern form, nests in the higher parts of the Catskills, the mountains of northern New York and northern New England, and northward and eastward into Canada; both visit us in migration and both winter in the tropics.

Washington, rather common T. V., May 8–31; Sept. 15–Oct. 20. Ossining, tolerably common T. V., May 15–June 1; Sept. 20–Oct. 17. Cambridge, uncommon T. V., May 18–28; Sept. 15–Oct. 9. N. Ohio, not common T. V., Apl. 29–May 23. Glen Ellyn, common T. V., May 1–June 4; Aug. 26–Oct. 9. SE. Minn., common T. V., May 7–; Sept. 8.

The Gray-cheeked and Bicknell's Thrushes are merely the larger northern and smaller southern forms, respectively, of the same species. They are known in the United States chiefly as migrants and can be distinguished with certainty in life only by an expert under favorable conditions. The larger form is the commoner. The species may be known from the Veery and Wood Thrush by its olive, instead of cinnamon-brown back, and from the Olive-backed Thrush by its whitish eye-ring and paler breast.

Brewster describes the song of the southern form (Bicknell's Thrush) as exceedingly like that of the Veery but more interrupted, while the ordinary call-note is practically identical with the *pheu* of the Veery. The nest is placed in low trees or bushes. The eggs are greenish blue spotted with brown.

OLIVE-BACKED THRUSH

Hylocichla ustulata swainsoni. Case 8, *Fig.* 81

Upperparts uniform olive; eye-ring buff; breast and sides of the throat deeper than in the Gray-cheeked Thrush. L. 7¼.

Range. Nests from northern Michigan and northern New England northward into Canada and southward in the mountains to West Virginia; winters in the tropics.

Washington, common T. V., Apl. 19–June 2; Sept. 2–Nov. 1. Ossining, tolerably common T. V., May 2–30; Sept. 19–Oct. 22. Cambridge, common T. V., May 12–28; Sept. 15–Oct. 5. N. Ohio, common T. V., Apl. 22–June 13; Sept. 2–Oct. 24. Glen

Ellyn, common T. V., Apl. 23–June 6; Aug. 16–Oct. 24. SE. Minn., common T. V., May 1–; Sept. 25–.

We know this Thrush chiefly as a migrant when, in the latter part of May, and again in September and October, it passes us *en route* to and from its northern home. At these seasons we may even hear its whistled *puit* from the sky as it journeys through the night. "Its song," Dwight says, "lacks the leisurely sweetness of the Hermit Thrush's outpourings, nor is there pause, but in lower key and with greater energy it bubbles on rapidly to a close rather than fading out with the soft melody of its renowned rival."

The Olive-back nests in bushes or low trees, and lays 3–4 greenish blue brown-spotted eggs in June.

HERMIT THRUSH

Hylocichla guttata pallasi. *Case* 4, *Fig.* 77; *Case* 5, *Fig.* 26

Back midway in color between Figs. 77 and 26; the tail noticeably brighter, more rusty. L. 7¼.

Range. Nests from Long Island (locally), the higher parts of Connecticut, and central Minnesota northward to Canada, and southward in the mountains to Maryland; winters from New Jersey and Ohio Valley to the Gulf States and Cuba.

Washington, very common T. V., sometimes not uncommon W. V., Apl. 6–May 17; Sept. 18–Nov. 12. Ossining, common T. V., Apl. 5–May 9; Oct. 18–Nov. 26. Cambridge, very common T. V., Apl. 15–May 5; Oct. 5–Nov. 15; occasionally one or two may winter; one summer record. N. Ohio, common T. V., Mch. 21–May 10; Oct. 2–28. Glen Ellyn, common T. V., Mch. 18–May 11; Sept. 14–Nov. 1. SE. Minn., common T. V. Apl. 1–; Sept. 13–Oct. 26.

The Hermit is the only one of the Thrushes to winter in the eastern United States and it is, therefore, the first one to reach us in the spring. It comes early in April and takes about a month to complete its migration. It rarely sings at this season and then only an echo of the heavenly music which has won for it first place among American songsters.

We may know the Hermit Thrush by the season in which he visits us, by his reddish brown tail, which he

slowly raises and lowers after alighting, and by the low *chuck* note with which he usually accomplishes this movement.

The Hermit nests on the ground, laying, in the latter part of May, 3–4 greenish-blue eggs, slightly lighter in tint than those of the Wood Thrush.

ROBIN

Planesticus migratorius migratorius. *Case* 4, *Fig.* 80; *Case* 5, *Fig.* 12

In spring and summer the head is blacker, the breast brighter, the bill more yellow than in fall and winter. L. 10.

Range. Nests from Virginia (in the mountains, northern Georgia) and northern Mississippi to Labrador and Alaska; winters from New Jersey and Ohio Valley to the Gulf. Birds from the lowlands, from Maryland southward, are somewhat smaller and paler and are known as the Southern Robin (*P. m. achrusterus*).

Washington, rather common S. R., abundant T. V., from Feb.–Apl.; irregularly common W. V. Ossining, common S. R., Mch. 4–Oct. 30; a few winter. Cambridge, very abundant S. R., common but irregular W. V. N. Ohio, abundant S. R., Feb. 26–Nov. 30; a few winter. Glen Ellyn, very common S. R., rare W. V., Jan. 25–Nov. 19. SE. Minn., common S. R., rare W. V., Mch. 8–Nov. 11.

The Robin is the best-known and probably most abundant of our native birds. Civilization agrees with him. Man has destroyed many of his enemies and has provided him with a bountiful supply of fruits and a vast area of lawns where worms are at his mercy. Sociable and trustful he has taken up his abode with us and become as much a part of our outdoor life as the flowers in our gardens and trees in our lawns. His varied calls have an intimate association with the hour and season and spring itself speaks through his cheerful song.

Robins show their confidence in us by building their nests in situations where few birds would venture to rear a family, and from mid-April to July they are occupied with household cares.

BLUEBIRD

Sialis sialis sialis. *Case 4, Fig. 78; Case 5, Fig. 13*

The Bluebird's red, white and blue mark him as a truly American bird. L. 7.

Range. Nests from the Gulf States to Florida; winters from Connecticut and northern Ohio southward.

Washington, common S. R., and W. V. Ossining, common P. R. Cambridge, common S. R., Mch. 6–Nov. 1; more numerous during migrations, in Mch. and Nov. N. Ohio, common S. R., Feb. 17–Nov. 18; a few winter. Glen Ellyn, fairly common S. R., Feb. 19–Nov. 18. SE. Minn., common S. R., Mch. 16–Oct. 31.

Not many years ago the Bluebird was as familiar as he was welcome about our homes; but too gentle to battle effectively with English Sparrows and Starlings for the possession of bird houses, he has sought such nesting sites in the orchard as the 'tree surgeons' have left. If we would not lose this bird, "beloved of children, bards and spring," who wears our national colors so modestly, we must supply him with a home in which he may rear his family in peace. It may be placed not only in our garden, but also in the orchard where it is less likely to be occupied by Sparrows or Starlings. It should be erected not later than March 15, for the Bluebird's bluish white eggs are laid in the first half of April.

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